ACOUSTICAL SOCIETY OF AMERICA

OFFICE OF THE
STANDARDS SECRETARIAT

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STANDARDS MANAGER

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S1/393

MINUTES

N00014-93-1-G019

ACCREDITED STANDARDS COMMITTEE ON ACOUSTICS, S1
U.S. TAG FOR ISO/TC43 ACOUSTICS AND IEC/TC29 ELECTROACOUSTICS

Denver, Colorado

7 October 1993

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MINUTES OF S1 MEETING HELD IN DENVER, COLORADO, ON 7 OCTOBER 1993

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MINUTES

ACCREDITED STANDARDS COMMITTEE ON ACOUSTICS, S1

U.S. TAG for ISO/TC 43 ACOUSTICS and IEC/TC 29 ELECTROACOUSTICS,

Denver, Colorado

7 October 1993

The meeting was called to order by Mr. G.S.K. Wong, Chair S1, at 1:30 PM, in the Savoy Room, the Radisson Hotel, Denver Colorado.

ORGANIZATIONAL MEMBERS PRESENT

Arrington, J.R.	U.S. Army Primary Standards Lab.
Brenig, A.	ASA Standards Manager
McKinley, R.L.	Vice Chair S1; USAF; Chair S1/WG15
Nedzelnitsky, V.	National Institute of Standards and Technology (NIST)
Schomer, P.D.	ASA; U.S. CERL
Wong, G.S.K.	Chair S1; ASA alternate representative S1

INDIVIDUAL EXPERTS PRESENT

Ehrlich, S.L.	Raytheon Co.
Eldred, K.M.	Past Chair ASACOS
Galloway, W.J.	Consultant
Gross. E.E.	Associate Editor STANDARDS NEWS, JASA
Guernsey, R.M.	R.M. Guernsey & Associates
Johnson, D.L.	Chair S12
Marsh, A.H.	Chair S1/WG2
Young, R.W.	Consultant

OTHERS PRESENT

Battenberg, P.	Quest Technologies
Buckingham, M.J.	Chair S1/WG23
Daigle, G.	Chair S1/WG20
Earshen, J.	Member S1/WG17
Embleton, T.F.W.	Chair ASACOS
Evans, D.J.	National Institute of Standards and Technology (NIST)
Feldman, R.	Member S1/WG21
Frederiksen, E.	B&K, Denmark
Krug, R.W.	Chair S1/WG17
Kuemmel, T.	Quest Technologies
Nyborg, W.	TC on Physical Acoustics
Pope, J.	Pope Engineering Co.
Steemeken, H.J.M.	TNO, Netherlands
Sutherland, L.	Member S1/WG2

1. Approval of the Minutes of Ottawa, Canada, meeting held 20 May 1993 (S1/384).

Upon motion made and seconded, it was

VOTED to approve the Minutes of the S1 meeting (S1/384) held on 20 May 1993, as circulated.

2. Organization

a) A list of current working groups is attached (see ATTACHMENT A).

b) New organizational members of S1: None to date.

c) New working groups:

(Please see procedural ballots, page).

d) Personnel changes - None to date.

e) A summary of activities is given in ATTACHMENT B.

3. Standards approved by ANSI in 1992/1993 and published (or being published) by ASA

Standards published by ASA can be ordered from the following address:

Professional Book Distributors (PBD)
ASA Standards Distribution Center
1650 Bluegrass Lakes Parkway
Alpharetta, Georgia 30239

Telephone: (404) 442-8633
Telefax: (404) 442-9742

NOTE: 20% discount on list price is available to ASA individual and sustaining members for all standards published by ASA.

4. Organizational matters and reports on working groups, including reports on letter ballots and international matters

a) S1/Advisory - Advisory Planning Committee to S1 - R.L. McKinley, Chair

The list of current S1 standards is attached together with Mr. McKinley's last report: (see ATTACHMENT C).

b) S1/WG1 - Standard Microphones and their Calibration - V. Nedzelnitsky, Chair

On the revision of ANSI S1.10-1966, Mr. Nedzelnitsky said at the last meeting that he estimated one to two years would be needed to revise the standard for S1 ballot. (It was agreed that we should not await the finalization of all of the IEC standards in the area because this would delay the national standardization.)

Mr. Nedzelnitsky presented the Standards Secretariat with a draft of the proposed revision of ANSI S1.12-1967 at the S1 meeting. This will be prepared for ballot in S1 (with the addition of an abstract, and approval by Mr. Wong).

c) S1/WG2 - Attenuation of Sound in the Atmosphere - A.H. Marsh, Chair

Mr. Marsh's report is given in ATTACHMENT D. A draft suitable for ballot is expected before the June 1994.

d) S1/WG4 - Measurement of Sound Pressure Levels in Air - M. Nobile, Chair

Mr. Nobile presented a report for the meeting (see ATTACHMENT E).

e) S1/WG5 - Band Filter Sets - L.W. Sepmeyer, Chair

At the last meeting, Mr. Johnson said the national standard should stay in force because it is superior to the standard developed in Europe.

It was agreed that a revision of ANSI S1.11-1986 should be prepared, looking at the matter of digital filters. In the interim, ANSI S1.11-1986 should be reaffirmed.

At the meeting, Mr. Marsh said that the U.S. would support the international standard in this area. Mr. Marsh said he would agree to this task once it

4. Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)

e) S1/WG5 - Band Filter Sets - L.W. Sepmeyer, Chair (continued)

was time to revise ANSI S1.11-1986, taking into account the international document now being finalized. Mr. Wong said that there was still another round of voting expected on the international standard, and that work on the national standard would have to await the publication of this international text. Therefore, no change in status would be expected until work the ANSI S1.11-1986 revision was due.

This proposed reaffirmation was sent to S1 ballot (see under Item 7, page)

f) S1/WG8 - Acoustical and Electroacoustical Vocabulary - W.J. Galloway, Chair

A draft revision of the terminology standard (ANSI S1.1-199X) draft dated March 1993, was prepared by Mr. W.J. Galloway, and sent to S1 for vote (and to S2, S3 and S12, for information and comment), LB/S1.1/380, on 26 March 1993. The ballot closed on 7 May 1993 with results as given in the last Minutes (S1/384).

At the last meeting, Mr. Johnson said that Mr. Galloway would be chairing this working group and that he and Mr. Young deserved thanks for preparing this proposed revision of ANSI S1.1-1960 Acoustical Terminology. A 30-Day Review of this proposed standard (30 Day Review/S1.1/391) was sent to S1 members on 27 August 1993, with a closing date of 27 September 1993 for response. The document was also submitted (on the same date) to ANSI for public comment. (See ATTACHMENT F for the cover sheet of this 30-Day review.)

At the meeting the enormous work of Mr. Galloway, together with the assistance of Messrs. Marsh and Young (and Messrs. Schomer and Winzer), were gratefully acknowledged. it was decided that once the standard had been completed, the working group could be disbanded. It was understood that where new terms needed development, or review, an ad hoc group could be constituted to undertake the task.

It was noted that some fifteen (15) terms relating to S3 required resolution but it was expected that this would occur by the end of the ASA meeting. Fourteen (14) of the fifteen (15) S3 terms under discussion had a solution and there may be one unresolved.

4. Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)

f) S1/WG8 - Acoustical and Electroacoustical Vocabulary - W.J. Galloway, Chair (continued)

It was agreed that if one term were not resolvable, then the term would be dropped from the current standard on terminology. On some other terms noted by Mr. Ehrlich, it was also agreed (between the parties at the meeting) that these terms would best be excluded from the current terminology standard. Accordingly, it was expected that the revision of ANSI S1.1-1960, so long awaited, would go forward for final processing in a matter of weeks.

g) S1/WG12 - Specification for and Calibration of Instruments to Measure Acoustic Intensity - G. Krishnappa, Chair

Mrs. Brenig reported at the meeting that Mr. Krishnappa had submitted (at this meeting) a document on Instruments for the Measurement of Sound Intensity, for ballot in S1. Following any needed editorial amendments, and the approval of Mr. Wong, this proposed standard will be sent to S1 for ballot.

h) S1/WG15 - Noise Canceling Microphones - R. McKinley, Chair

Mr. McKinley reported at the last meeting that a final draft was expected for S1 ballot by 31 October 1993.

Mr. McKinley's report is given in ATTACHMENT G.

i) S1/WG16 - FFT Acoustical Analyzers - R.J. Peppin, Chair

No recent report has been received from Mr. Peppin. It was agreed that it might be more suitable to prepare a Technical Report rather than a standard in this area, and Mr. Wong will contact Mr. Peppin in this regard.

j) S1/WG17 - Sound Level Meters and Integrating Sound Level Meters - R.W. Krug, Chair

The proposed ANSI Standard Specification for Integrating-averaging sound level, meters, draft dated June 1992, was sent to S1 ballot (S1.43/370) on 20 July 1992. The ballot was closed on 31 August 1992 and the results are given in in previous S1 Minutes (S1/375). Mr. Krug said previously that he was trying to resolve the negative votes.

4. Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)

j) S1/WG17 - Sound Level Meters and Integrating Sound Level Meters - R.W. Krug, Chair (continued)

At the meeting, Mr. Krug reported that he had prepared a document which had been submitted to the ASA Standards Secretariat for ballot. This document is expected to be prepared for S1 ballot shortly.

On the subject of reaffirmation of ANSI S1.4-1983 (including Amendment S1.4-1985), it was agreed that this standard should be reaffirmed pending its revision.

Mr. Krug said that his working group planned to meet the following day, 8 October 1993, and that a report would be forthcoming. (see ATTACHMENT H).

k) S1/WG18 - Ultrasonic Sound Source for Leak Simulation - S.L. Morford, Chair

It was agreed that a follow-up letter, asking for the status of these activities, should be sent to Mr. Morford.

l) S1/WG19 - Insertion Loss of Windscreens - R. Peppin, Chair

At the meeting, Mr. Arrington suggested that the document being prepared by this working group should be downgraded to a Technical Report, rather than a standard. He added that production of such a document in the near future was not likely, due to workload constraints.

m) S1/WG20 - Ground Impedance - G. Daigle, Chair

Mr. Daigle reported as follows at the meeting:

> The working group has been reviewing ompeting techniques to measure ground impedance. Controversy over some of these techniques has appeared in the scientific literature during the last six months. The working group has put a hold on its writing activities until the technical issues can be resolved.

n) S1/WG21 - Electromagnetic Susceptibility (EMS) of Acoustical Instruments - J. Seiler, Chair

There will be a report on the working group meeting held on 6 October 1993.

4. Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)

n) S1/WG21 - Electromagnetic Susceptibility (EMS) of Acoustical Instruments - J. Seiler, Chair (continued)

Mr. Kuemmel reported at the meeting that it was hoped to have a document for S1 ballot by May 1994. The Minutes of the most recent meeting of the this working (held on 6 October 1993) will be sent to the Standards Secretariat.

o) S1/WG22 - Cavitation Detecting and Monitoring - W.L. Nyborg, Chair

Mr. Nyborg reported prior to the meeting that work was continuing on preparation of draft material. The working group met on 4 October 1993 during the ASA meeting.

Mr. Nyborg reported that his working group was preparing a Technical Report rather than a standard, and that Mr. Galloway had agreed (in ASACOS) to draft some guidelines for use in preparing such material.

p) S1/WG23 - Underwater Acoustics - M.J. Buckingham, Chair

At the last meeting, Mr. Wong reported that Mr. Buckingham would draft a plan to represent all the factions in the Navy in order to determine what each group needed in terms of standards. This should be prepared within six months.

Mr. Buckingham submitted a report prior to the meeting (see ATTACHMENT I).

5. Work items without working groups

None to date.

6. International Matters

General

a) International Electrotechnical Commission (IEC)

- IEC/TC 29 Electroacoustics - V. Nedzelnitsky, Technical Advisor

(i) A list of documents submitted to the U.S. for vote and/or comment is given in ATTACHMENT J. Mr. Nedzelnitsky's report is also attached ATTACHMENT K. The next meeting of IEC/TC 29 last met in Oslo, Norway from 24-28 May 1993.

6. International Matters (continued)

General (continued)

- ISO/TC 43 Acoustics and ISO/TC 43/SC1 Noise - H.E. von Gierke, TAG Chair

  (i) A report has been prepared (see ATTACHMENT L). Mr. Schomer's report is given in ATTACHMENT M.

  ISO/TC 43 and ISO/TC 43/SC1 last met from 31 May to 4 June 1993, in Oslo, Norway.

7. Review of Standards more than five years in existence

a) It has previously been reported that the U.S. Department of the Army wishes to adopt the revisions of standards ANSI S1.8-1989 and ANSI S1.10-1966 when they become available.

b) Section 4.4 of the ANSI Procedures for the Development and Coordination of American National Standards requires that each complete American National Standard (including its supplements and addenda) be reviewed at least every five years to determine whether it should be reaffirmed, revised, or withdrawn. Provision is made for extension of time, except that no extension is granted beyond ten (10) years from the date of approval by ANSI.

Three standards were recommended for reaffirmation during the last meeting:

- ANSI S1.11-1986 Specifications for Octave-Band and Fractional-Octave-Band Analog and Digital Filters
- ANSI S1.20-1988 Procedures for Calibration of Underwater Electroacoustics Transducers
- ANSI S1.42-1986 Design Response of Weighting Networks for Acoustical Measurements

It was determined by ANSI that since ANSI S1.42-1986 had in fact been reaffirmed in 1992, there was no need for reaffirmation at this time. The ballot to reaffirm the remaining two standards was circulated (LB/S1/388) on 20 September 1993, with results as given in ATTACHMENT N. The two standards noted above were sent to ANSI for public comment on 20 July 1993 (the public comment period extends from 3 September to 2 November 1993). Following their expected reaffirmations, it will be determined whether or not these two standards require revision.

7. Review of Standards more than five years in existence (continued)

It was agreed at the meeting that recommendations for the reaffirmation and/or revision of the following standards should be obtained: Accordingly, each standard was assigned to the individual(s) noted below:

- ANSI S1.6-1984 (R 1990) — T.F.W. EMBLETON
  American National Standard Preferred Frequencies Frequency Levels, and Band Numbers for Acoustical Measurements

- ANSI S1.8-1989 — T.F.W. EMBLETON
  American National Standard Reference Quantities for Acoustical Levels

- ANSI S1.40-1984 — J. SEILER, V. NEDZELNITSKY, R.W. KRUG
  American National Standard Specification for Acoustical Calibrators

Recommendations on the above standards are expected shortly.

8. New International Standards Available

- IEC 118-2 - Amendment 1 - 1993 Hearing aids, Part 2: Hearing aids with automatic gain control circuits

9. Procedural Ballots

a) According to ANSI's procedures, under which the Accredited Standards Committees operate, the Officers of the Standards Committees are to be confirmed (at the beginning of their terms), as well as Individual Experts (the latter to be confirmed annually) by the respective Standards Committees.

The Officers and Individual Experts are proposed by the ASA Committee on Standards (ASACOS), as the Secretariat for the Standards Committees, in connection with the Chairs of the respective Standards Committees.

A letter ballot will be circulated to S1 in December 1993 on the proposed appointments for 1994/1995. The respective appointments, if approved, will take effect following the June 1994 meeting of ASA.

b) The proposals to disband working groups S1/WG 7 Personal Noise Dosimeters and S1/WG10 Scales and Ratios for Plotting were sent to S1 ballot (LB/S1/389) on 20 July 1993. These ballots were closed on 7 September 1993 with results as given in ATTACHMENT Q. According to the unanimous results of the ballot, the working groups have now been disbanded.

10. Other Business

At the meeting, Mr. Daigle presented a report (requested at the previous S12 meeting) on the different standards being prepared under various working groups in S1 and S12.

This is a draft synopses of national efforts for the measurement, calculation or prediction of sound pressure levels in air. Please see ATTACHMENT P for Mr. Daigle's report.

11. New Business

At the last meeting, Mr. Wong noted that EDITORIAL COMMITTEES would be formed in S1 (as well as in S2, S3 and S12) to examine the newly prepared international standards and the possibility of adopting these standards nationally, as ANSI standards. This will be an ongoing activity, and each S Committee Chair and Vice Chair will receive a current listing of the IEC and ISO standards to review.

12. Future Meetings

The next meeting of S1 will be held on Thursday, 9 June 1994, in Cambridge, Mass. commencing at 3:00 PM.

13. Adjournment

The S1 meeting was adjourned at 2.35 PM.

Avril Brenig
Standards Manager

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S1/393
ATTACHMENT A-1

ACCREDITED STANDARDS COMMITTEE ON ACOUSTICS - S1

SECRETARIAT: Acoustical Society of America

SCOPE: Standards, specifications, methods of measurement and test, and terminology in the field of physical acoustics including architectural acoustics, electroacoustics, sonics and ultrasonics, and underwater sound, but excluding those aspects which pertain to biological safety, tolerance and comfort.

CHAIR: G.S.K. Wong
Institute for National
Measurement Standards
National Research Council
Montreal Road
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VICE CHAIR: R.L. McKinley
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New York, NY 10005-3993
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WORKING GROUP	TITLE AND SCOPE	CHAIR
(a) S1/Advisory	S1 Advisory Planning Committee - Be cognizant of needs within the scope of the Committee, and organize those needs in accordance with priority, and other relevant factors, into a coherent three year plan for Committee activity. This three year plan for the preparation of standards should include those which need updating, having regard to the international work items and standards, and the need for timely review (reaffirmations, revisions, withdrawals, etc.) of all national standards, and the priority of new standards needs. The plan of action should be developed with attention to (i) the overall Committee scope, (ii) its technological needs, (iii) the relation of national to international standardization, (iv) the rate of development of new standards, and (v) the timeliness of the preparation of revisions of standards.	R.L. McKinley

WORKING GROUP	TITLE AND SCOPE	CHAIR
(b) S1/WG1	Standard Microphones and their Calibration (counterpart to IEC/TC29/WG5 and IEC/TC29/WG8) - Revision of S1.10-1966 (R 1986) Method for the Calibration of Microphones and S1.12-1967 (R 1986) Specification for Laboratory Standard Microphones.	V. Nedzelnitsky
(c) S1/WG2	Attenuation of Sound in the Atmosphere - Preparation of standards describing recommended procedures to account for attenuation of sound waves propagating through the atmosphere.	A.H. Marsh
(d) S1/WG4	Measurement of Sound Pressure Levels in Air - Revision of S1.13-1971 (R 1986) Methods for the Measurement of Sound Pressure Levels.	M. Nobile
(e) S1/WG5	Band Filter Sets - Review of international documents/standards	L.W.Sepmeyer
(f) S1/WG8	Acoustical and Electroacoustical Vocabulary - Revision of S1.1-1960 Acoustical Terminology, but excluding mechanical shock and vibration and psychoacoustical vocabulary.	D.L. Johnson
(g) S1/WG12	Specifications for and Calibration of Instruments to Measure Acoustic Intensity - To develop a standard specifying the performance characteristics and calibration procedures of instruments to measure acoustic intensity at an arbitrary point in space.	G. Krishnappa
(h) S1/WG15	Noise Canceling Microphones - Preparation of standards defining directional (noise discriminating) and noise canceling microphones and microphone systems and describing recommended procedures for measuring their performance in a noise field.	R.L.McKinley
(i) S1/WG16	FFT Acoustical Analyzers - to develop a specification that will apply to Fast Fourier Transform (FFT) analyzers	R.J. Peppin

WORKING GROUP	TITLE AND SCOPE	CHAIR
(j) S1/WG17	Sound Level Meters and Integrating Sound Level Meters - to develop a standard for specifying exponential and integrating averaging sound level meters.	R.W. Krug
(k) S1/WG18	Ultrasonic Sound Source for Leak Simulation - to develop a standard method for producing a repeatable ultrasonic sound source for the calibration and testing of ultrasonic leak detectors.	S. Morford
(l) S1/WG19	Insertion Loss of Windscreens - to develop a test method that characterizes windscreens so that users can know the effect of windscreens on measurements, including self noise. Specifically to consider screens that fit commercial (1/2" and 1/4") measuring microphones, commonly used for outdoor and indoor measurements in conditions with wind. Also, screens for intensity probes would be considered.	R.J. Peppin
(m) S1/WG20	Ground Impedance	G. Daigle
	i) Measurement of Ground Impedance - to develop a standard describing recommended procedures to characterize and the instrumentation tc measure the acoustic properties of a wide variety of natural ground surfaces outdoors.	
	ii) Attenuation of Sound due to the Ground - to develop a standard describing recommended procedures to account for the attenuation of sound propagating in the presence of the ground.	
(n) S1/WG21	Electromagnetic Susceptibility (EMS) of Acoustical Instruments - Electromagnetic fields can interfere with the operation of instruments by introducing errors and producing erroneous readings. The proposed working group will study the susceptibility requirements for acoustical instrumentations operating in electromagnetic fields. Test methods will be recommended. To facilitate uniform implementation and understanding, the working group will study and recommend criterion levels, against which the susceptibility of the instruments can be evaluated.	J. Seiler

WORKING GROUP	TITLE AND SCOPE	CHAIR
(o) S1/WG22	Cavitation Detecting and Monitoring Equipment and techniques are to be described and compared (1) for detection and characterization of small gas bodies which may serve as sites for cavitation and (2) for monitoring cavitation activity. Passive methods employ optical, electrical and acoustical techniques. Active methods depend on physical, chemical or biological effects produced by the cavitation. Terminology is to be defined. Capabilities and limitations of the methods are to be discussed for various applications.	W.L. Nyborg
(p) S1/WG23	Underwater Acoustics -acoustic propagation -scattering -ambient noise -seismic surveying -acoustics telemetry -acoustics imaging -inversion techniques -active and passive sonars (transduction) -calibration	M.J. Buckingham

ATTACHMENT B-1
S1/393

STATUS REPORT

FIELD: STATUS: ACOUSTICS

COMMITTEE: S1

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	METHOD	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S1.1-1960	Acoustical Terminology (including Mechanical Shock and Vibration) (S1/WG8)			S	Withdrawn on 2 March 1981
S1.1-199X	Acoustical Terminology (including Noise) (S1/WG8)	RV	6	S	
S1.2-1962 (R 1976)	Method for the Physical Measurement of Sound	withdrawn	0	S	Superseded by series of sound power standards (S12.30 series)
S1.4-1983	Sound Level Meters, Specifications for	UD; ES			
	includes:				
S1-4A-1985	Amendment to ANSI S1.4-1983 (S1/WG2)	UD			
S1.6-1984 (R 1990)	Preferred Frequencies, Frequency Levels, and Band Numbers for Acoustical Measurements	UD		S	

STATUS		ACTIVITY		METHOD
NS - NEW STD IN PROCESS	NR - NEEDS REVIEW	0-NONE	4-ANSI STANDARDS ACTION	C-ACCREDITED CANVASS
RF - REAFFIRMATION IN PROC.	AP - ANSI APPROVED	1-FORMATIVE STAGE	5-OBJECTIONS BEING CONSIDERED	O-ACCREDITED ORG.
RV - REVISION IN PROCESS	OP - OUT OF PRINT	2-DRAFTING STANDARD	6-ANSI CONSIDERING APPROVAL	S-ACCREDITED STDS. COMMITTEE
WD - WITHDRAWAL IN PROCESS	NA - NOT YET AVAIL.	3-VOTING ON PROPOSAL		X-NOT INTENDED FOR ANSI
ES - ENVIRONMENTAL SOUND	UD - UP-TO-DATE			
SP - SUBMITTED PINS FORM				

STATUS REPORT

FIELD: **STATUS:** ACOUSTICS

COMMITTEE: S1

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	METHOD	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S1.8-1989	Preferred Reference Quantities for Acoustical Levels		UD		S
S1.9-199X	Sound Intensity Standard (S1/WG12)		NS	3	S
S1.10-1966 (R 1986)	Calibration of Microphones, Method for the (revision of Z24.4 and Z24.11) (S1/WG1)		RV	1	
S1.11-1986	Specification for Octave-Band and Fractional-Octave-Band Analog and Digital Filters (S1/WG5)		UD		S
S1.12-1967 (R 1986)	Laboratory Standard Microphones, Specification for (revision of Z24.8-1949) (S1/WG1)		RV	2	S

STATUS

NS - NEW STD IN PROCESS
RF - REAFFIRMATION IN PROC.
RV - REVISION IN PROCESS
WD - WITHDRAWAL IN PROCESS
ES - ENVIRONMENTAL SOUND
SP - SUBMITTED PINS FORM

NR - NEEDS REVIEW
AP - ANSI APPROVED
OP - OUT OF PRINT
NA - NOT YET AVAIL.
UD - UP-TO-DATE

ACTIVITY

0-NONE
1-FORMATIVE STAGE
2-DRAFTING STANDARD
3-VOTING ON PROPOSAL
4-ANSI STANDARDS ACTION
5-OBJECTIONS BEING CONSIDERED
6-ANSI CONSIDERING APPROVAL

METHOD

C-ACCREDITED CANVASS
O-ACCREDITED ORGANIZATION
S-ACCREDITED STDS. COMMITTEE
X-NOT INTENDED FOR ANSI

STATUS REPORT

FIELD: **STATUS:** ACOUSTICS

COMMITTEE: S1

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	METHOD	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S1.13-1971 (R 1986)	Measurement of Sound Pressure Levels, Methods for (S1/WG4)	RV;ES	2	S	
S1.14	DESIGNATION OPEN	NA	0		
S1.15	DESIGNATION OPEN	NA	0		
S1.16	DESIGNATION OPEN	NA	0		
S1.17	DESIGNATION OPEN	NA	0		
S1.18	DESIGNATION OPEN	NA	0		
S1.20-1988	Calibration of Underwater Electroacoustic Transducers (S1/WG9)	UD	0	S	

STATUS

NS - NEW STD IN PROCESS
RF - REAFFIRMATION IN PROC.
RV - REVISION IN PROCESS
WD - WITHDRAWAL IN PROCESS
ES - ENVIRONMENTAL SOUND
SP - SUBMITTED PINS FORM
NR - NEEDS REVIEW
AP - ANSI APPROVED
OP - OUT OF PRINT
NA - NOT YET AVAIL.
UD - UP-TO-DATE

ACTIVITY

0-NONE
1-FORMATIVE STAGE
2-DRAFTING STANDARD
3-VOTING ON PROPOSAL
4-ANSI STANDARDS ACTION
5-OBJECTIONS BEING CONSIDERED
6-ANSI CONSIDERING APPROVAL

METHOD

C-ACCREDITED CANVASS
O-ACCREDITED ORGANIZATION
S-ACCREDITED STDS. COMMITTEE
X-NOT INTENDED FOR ANSI

STATUS REPORT

FIELD: **STATUS:** ACOUSTICS
COMMITTEE: S1

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	METHOD	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S1.22-1992	Scales and Sizes for Frequency Characteristics and Polar Diagrams in Acoustics (S1/WG10)	UD		S	
S1.24	Evaluation of Cleaning Performance of Ultrasonic Equipment	SP	0	S	
S1.25-1991	Personal Noise Dosimeters, Specifications for (S1/WG7) (Revision of ANSI S1.25-1978)	UD		S	
S1.26-1978 (R 1989)	Method for Calibration of the Absorption of Sound by the Atmosphere (S1/WG3)	RV	2	S	
S1.40-1984 (R 1990)	Specification for Acoustical Calibrators	ES	0	S	

STATUS

NS - NEW STD IN PROCESS
RF - REAFFIRMATION IN PROC.
RV - REVISION IN PROCESS
WD - WITHDRAWAL IN PROCESS
ES - ENVIRONMENTAL SOUND
SP - SUBMITTED PINS FORM
NR - NEEDS REVIEW
AP - ANSI APPROVED
OP - OUT OF PRINT
NA - NOT YET AVAIL.
UD - UP-TO-DATE

ACTIVITY

0-NONE
1-FORMATIVE STAGE
2-DRAFTING STANDARD
3-VOTING ON PROPOSAL
4-ANSI STANDARDS ACTION
5-OBJECTIONS BEING CONSIDERED
6-ANSI CONSIDERING APPROVAL

METHOD

C-ACCREDITED CANVASS
O-ACCREDITED ORGANIZATION
S-ACCREDITED STDS. COMMITTEE
X-NOT INTENDED FOR ANSI

STATUS REPORT

FIELD: **STATUS:** ACOUSTICS

COMMITTEE: S1

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	METHOD	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S1.XX-199X	Evaluation of Digital Instruments, Methods for	NS;NA	0		
S1.42-1986 (R 1992)	Design Response for Weighting Networks for Acoustical Measurements (S1/WG13)	UD	6	S	
S1.43-199X	Complete Integrating Sound Level Meter, Specification for (incorporating parts of S1.4-1983) (S1/WG17)	NS;NA SP	2		
S1.XX-199X	Ultrasonic Sound for Leak Simulation (S1/WG18)	NS;SP	1		

STATUS

NS - NEW STD IN PROCESS
RF - REAFFIRMATION IN PROC.
RV - REVISION IN PROCESS
WD - WITHDRAWAL IN PROCESS
ES - ENVIRONMENTAL SOUND
SP - SUBMITTED PINS FORM
NR - NEEDS REVIEW
AP - ANSI APPROVED
OP - OUT OF PRINT
NA - NOT YET AVAIL.
UD - UP-TO-DATE

ACTIVITY

0-NONE
1-FORMATIVE STAGE
2-DRAFTING STANDARD
3-VOTING ON PROPOSAL
4-ANSI STANDARDS ACTION
5-OBJECTIONS BEING CONSIDERED
6-ANSI CONSIDERING APPROVAL

METHOD

C-ACCREDITED CANVASS
O-ACCREDITED ORGANIZATION
S-ACCREDITED STDS. COMMITTEE
X-NOT INTENDED FOR ANSI

STATUS REPORT

FIELD: STATUS: ACOUSTICS

COMMITTEE: S1

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	METHOD	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S1.XX-199X	Insertion Loss of Windscreens (S1/WG19)	NS;SP	1		
S1.XX-199X	Ground Impedance (S1/WG20)	NS;SP	2		

STATUS

NS - NEW STD IN PROCESS
RF - REAFFIRMATION IN PROC.
RV - REVISION IN PROCESS
WD - WITHDRAWAL IN PROCESS
ES - ENVIRONMENTAL SOUND
SP - SUBMITTED PINS FORM
NR - NEEDS REVIEW
AP - ANSI APPROVED
OP - OUT OF PRINT
NA - NOT YET AVAIL.
UD - UP-TO-DATE

ACTIVITY

0-NONE
1-FORMATIVE STAGE
2-DRAFTING STANDARD
3-VOTING ON PROPOSAL
4-ANSI STANDARDS ACTION
5-OBJECTIONS BEING CONSIDERED
6-ANSI CONSIDERING APPROVAL

METHOD

C-ACCREDITED CANVASS
O-ACCREDITED ORGANIZATION
S-ACCREDITED STDS. COMMITTEE
X-NOT INTENDED FOR ANSI

ACOUSTICAL SOCIETY OF AMERICA

OFFICE OF THE
STANDARDS SECRETARIAT

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Telefax (212) 248-0146

S1/393
ATTACHMENT C-1

S1 STANDARDS ON ACOUSTICS

ANSI S1.4-1883 (includes ANSI S1.4A-1985 Amendment)	Specification for Sound Level Meters
ANSI S1.6-1984 (R 1991)	Preferred Frequencies, Frequency Levels, and Band Numbers for Acoustical Measurements
ANSI S1.8-1989	Reference Quantities for Acoustical Levels
ANSI S1.10-1966 (R 1986)	Method for the Calibration of Microphones
ANSI S1.11-1986	Specification for Octave-Band and Fractional-Octave-Band Analog and Digital Filters
ANSI S1.12-1967	Specifications for Laboratory Standard Microphones
ANSI S1.13-1971 (R 1986)	Methods for the Measurement of Sound Pressure Levels
ANSI S1.20-1988	Procedures for Calibration of Underwater Electroacoustic Transducers
ANSI S1.22-1992	Scales and Sizes for Frequency Characteristics and Polar Diagrams in Acoustics
ANSI S1.25-1991	Personal Noise Dosimeters

S1 STANDARDS ON ACOUSTICS (continued)

ANSI S1.26-1978 (R 1989)	Method for the Calculation of the Absorption of Sound by the Atmosphere
ANSI S1.40-1984 (R 1990)	Specification for Acoustical Calibrators
ANSI S1.42-1986 (R 1992)	Design Response of Weighting Networks for Acoustical Measurements

COMMITTEE CORRESPONDENCE

To: George Wong, Chair S1 1 Oct 1993

Subject: S1 Advisory Planning Committee Report

From: Richard McKinley, Vice Chair S1

The following table lists the current schedule for the S1 working group standards development as is currently known. Additional information will be added as it becomes available.

Working Group	Title	Chair	WG Draft	Draft for Ballot
S1/WG1	Standard Microphones	V. Nedzelnitsky	May 94	May 95
	Microphone Calibration		May 93	Nov 93
S1/WG2	Attenuation of Sound in the Atmosphere	A. Marsh		
S1/WG4	Measurement of SPL in Air	M. Noble	May 93	Nov 93
S1/WG5	Band Filter Sets	A. Marsh		
S1/WG8	Acoustical and Electro-acoustical Vocabulary	W.J. Galloway		
S1/WG12	Specifications for and Calibration of Instruments to Measure Acoustic Intensity	G. Krishnappa		Jun 93
S1/WG15	Noise Canceling Microphones	R. McKinley		Oct 93
S1/WG17	Sound Level Meters and Integrating Sound Level Meters	R. Krug		
S1/WG18	Ultrasonic Sound Source for Leak Simulation	S. Morford		
S1/WG19	Insertion Loss of Windscreens Nearly complete draft	R. Peppin		Jan 94
S1/WG20	Ground Impedance	G. Daigle		Nov 94
S1/WG21	Electromagnetic Susceptibility of Acoustical Instruments	J. Seiler	New WG	
S1/WG22	Cavitation Detecting and Monitoring	W. Nyborg	New WG	
S1/WG23	Underwater Acoustics	M. Buckingham		New WG

Richard L. McKinley
Vice Chair, S1

Current Status of S1 Standards on Acoustics

Currently three (possibly 4) standards are overdue on revision or reaffirmation. S1/WG1 is working of revisions of S1.10 and S1.12. S1/WG4 is working on a revision of S1.13.

S1.8 and S1.26 should be revised or submitted for reaffirmation this year.

S1.6 and S1.40 should be revised or submitted for reaffirmation for 1995.

ANSI S1.4-1983(ASA-47) American National Standard Specification for Sound Level Meters
(Needs Revision or Reaffirmation - ?)

ANSI S1.6-1984(R1990)(ASA 53) American National Standard Preferred Frequencies, Frequency Levels, and Band Numbers for Acoustical Measurements

ANSI S1.8-1989(ASA 84) American National Standard Reference Quantities for Acoustical Levels

ANSI S1.10-1966(R 1986) American National Standard Method for the Calibration of Microphones
(Needs Revision or Reaffirmation - Overdue)

ANSI S1.11-1986(ASA 65) American National Standard Specification for Octave-Band and Fractional-Octave-Band Analog and Digital Filters
(Affirmative Vote for Reaffirmation Sep 93)

ANSI S1.12-1967(R 1986) American National Standard Specifications for Laboratory Standard Microphones
(Needs Revision or Reaffirmation - Overdue)

ANSI S1.13-1971(R 1986) American National Standard Methods for the Measurement of Sound Pressure Levels
(Needs Revision or Reaffirmation - Overdue)

ANSI S1.20-1988(ASA 75) American National Standard Procedures for the Calibrations of Underwater Electroacoustic Transducers
(Affirmative Vote for Reaffirmation Sep 93)

ANSI S1.26.1978(R 1989)(ASA 23) American National Standard Method for the Calculation of the Absorption of Sound by the Atmosphere

ANSI S1.40-1984(R1990)(ASA 40) American National Standard Specification for Acoustical Calibrators

ANSI S1.42-1986(R1992)(ASA 64) American National Standard Design Response of Weighting Networks for Acoustical Measurements

INPUT FOR S1 ADVISORY PLANNING COMMITTEE DATA BASE

Please complete this form and mail to

Richard L. McKinley
AL/CFBA
2610 Seventh Street, B441
WPAFB, OH 45433-7901

Please complete by October 30, 1993.

S1 Working Group _____

Chairman _____

Mailing Address _____

_____

_____

Phone Business _____

Home _____

FAX _____

E-Mail Address _____

Planned Completion Dates for

Working Group Draft _____

Draft for Ballot _____

List Current ANSI/ASA Standards under Review or Reaffirmation

_____

_____

Describe below any interaction with international standards that apply to your working group or S1 in general.

S1/393
ATTACHMENT D

7 October 1993

REPORT TO S1

Working Group S1/WG2 - Attenuation of Sound in the Atmosphere

Working Group S1/WG2 met on Tuesday, 5 October 1993, to review a draft of the revision of ANSI S1.26-1978. The revision of ANSI S1.26-1978 is intended to be technically equivalent to Part 1 of ISO 9613 in the specification of the method to calculate attenuation of sound by absorption mechanisms during propagation through air. Revision to the text of various subclauses will be incorporated into another Working Draft that will be circulated to the Members of S1/WG2. The result of that circulation should yield a document ready for circulation to S1 before June 1994.

A.H. Marsh, Chair
S1/WG2
7 October 1993

S1/393
ATTACHMENT E

Report for S1/WG4 - Measurement of Sound Pressure Levels in Air

The working group has agreed that the fourth draft of ANSI S1.13 dated 93Sep24 is ready to go to balloting. As has been reported here several times before, this is a complete re-writing of the previous version of S1.13, published in 1971. However, we have decided to keep the same number and title, as its purpose is the same and it still represents ANSI's fundamental standard for the measurement of sound pressure levels.

Working Group S1-4 is eager to receive comments from the voting members, individual experts, and members of the general public who may be invited to review the document. We anticipate that the first comment from many reviewers will be that the document is too long! However, we are prepared to defend its length. There is a lot of explanatory material in the text, and this was deliberate. We envision that this standard will serve as an introduction to the measurement of sound pressure levels, for not only practitioners in the field but to a wide audience, including regulators and the lay public. It will most likely also serve as an introduction to ANSI standards in Acoustics, in general, and will hopefully inspire users to obtain some of the more specialized (and shorter) acoustical standards.

One of the key elements of the standard is the classification of sound, which we've spent much time on, and which differs from the previous version of S1.13. We hope S1 members will pay especially close attention to this during their reviews.

Respectfully submitted by Matthew A. Nobile,
Chair WG/S1-4, 1993 September 28

ACOUSTICAL · SOCIETY · OF · AMERICA

OFFICE OF THE
STANDARDS SECRETARIAT

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STANDARDS MANAGER

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Telex 960883 AMINSTPHYS NYK
Telefax (212) 949-0473

S1/393
ATTACHMENT F-1

30 Day Review/S1.1/391
27 August 1993

TO: THE MEMBERS OF ACCREDITED STANDARDS COMMITTEE S1 (AND TO S2, S3 AND S12 MEMBERS FOR INFORMATION)

• 30 DAY REVIEW •
on proposed American National Standard S1.1-199X
Acoustical Terminology (a revision of ANSI S1.1-1960)

The ballot on the March 1993 draft of the revision of ANSI S1.1-1969 (R 1976) Acoustical Terminology, closed on 5 May 1993 with the following votes in S1: 6 affirmative, 3 negative, no abstentions, and 8 not returned. The three negative votes were received from two individuals (C.D. Bohl), American Industrial Hygiene Association, and (P.D. Schomer), for the U.S. Army Construction Engineering Research Laboratory, and the Acoustical Society of America). Negative comments were also received from S.L. Ehrlich, Individual Expert to S1.

The document was also circulated for comment to Accredited Standards Committees S2, S3, and S12. Comments were received from organizational representatives, individual experts and others on the March 1993 draft.

Accordingly, the working group chaired by W.J. Galloway, has diligently completed an extensive review of the comments and incorporated many editorial changes to the text. Enclosed therefore is the second draft, dated July 1993, of the proposed standard on Acoustical Terminology.

You are asked to review this July 1993 draft of the above document, which was developed as a result of incorporating comments received from the negative voters and other commentors. It is the understanding of the ad hoc working group that these comments have successfully addressed the negative votes and comments and that these voters and commentors will therefore approve this second draft.

If we do not hear from you by 27 September 1993, we will assume that you are in agreement with the changes made to the text, as given in the draft dated July 1993. Provided there is agreement with this draft, we will then proceed to submit the document to the next stage of development under ANSI procedures, for approval as an American National Standard.

Avril Brenig
Standards Manager

cc: Behar
Ehrlich
Frank
Galloway
Johnson
Marsh
McKinley
Royster
Schomer
Wong
Young

Enclosures: ATTACHMENT A 2nd draft of proposal ANSI S1.1-199x, dated July 1993.

ATTACHMENT B: Note to reviewers of second draft, from W.J. Galloway, dated 29 July 1993

ATTACHMENT B to
30 Day Review/S1.1/321
27 August 1993

29 July 1993

Note to Reviewers, 2nd draft, Revision of
S1.1-1960 (R1976) *American National Standard Acoustical Terminology*

Responses to the ballot for the first draft, dated 5 March 1993, of a revision of "Acoustical Terminology" produced three negative votes, with comments, as well as comments from positive S1 voters. The ad hoc working group has resolved one of the negative votes with a change in the caption on Table 13.2. Extensive changes were made, particularly in section 4.0, "Levels", and in the parallel definitions of basic quantities in section 3.0, in an attempt to resolve with the negative voter, who voted for two organization, his objections. The ad hoc group understands that these changes will cause the two votes to be reversed, leaving no negative votes.

Many helpful suggestions were received from individual experts from S1 and from reviewers from S1 and S12, who were not voters. Every attempt to accommodate these suggestions has been made where possible. In a number of cases this has not been feasible where a proposal was in conflict with an existing international terminology definition in IEC 801: Acoustics and Electroacoustics Vocabulary. (ASACOS policy is to follow IEC wherever possible.) In a number of other instances requests for changes or additions were made which, despite the admonition on the ballot that comments without suggested wording would not be accepted, were not accompanied by suggested text. A number of these suggestions were considered by the ad hoc group to be more appropriately included in a revision of S3.20 *American National Standard Psychoacoustical Terminology*, which is now undergoing revision. In some cases the ad hoc committee was able to generate revised text to meet a number of the suggestions, but did not feel it was within its scope to add numerous additional terms where no text to do so was provided.

All told, several hundred editorial changes have been made to the first draft document. The ad hoc working group hopes that these changes will be acceptable to those reviewers who approved the original draft.

William J. Galloway

S1/393
ATTACHMENT G

COMMITTEE CORRESPONDENCE

7 Oct 1993

George Wong, Chair S1,

S1/WG15 did not meet at the Denver meeting of the Acoustical Society. A draft of the standard on measurement of the performance of noise canceling microphones is being circulated to the working group and yourself for final comments prior to being submitted to S1 for balloting. The draft standard should be forwarded to S1 for balloting by the end of Oct 93. The working group plans to meet in Boston for resolution of any comments or negative votes resulting from the balloting.

Sincerely,

Richard L. McKinley
Chair, S1/WG15

S1/393
ATTACHMENT H

October 8, 1993
Bob Krug
Cirrus Research Inc.
6423 W. North #170
Wauwatosa, WI 53213
Tel 414 258-0717
Fax 414 258-0896

Avril Brenig
Acoustical Society of America
120 Wall Street
32nd Floor
New York, NY 1005-3993

Avril:

S1/WG17 Sound Level Meters held a meeting on October 8, 1993 in Denver.

Acting on a request from R. L. McKinley, we request that S1.4 Sound Level Meters, as amended in 1985 be reaffirmed.

A short discussion was held on the forth draft of ANSI S1.43-199x which is currently in your office awaiting circulation to members of S-1.

A detailed discussion was held on the IEC TC29/WG4 Working draft 4: 1993 Aug., Sound level meters for the purpose of generating a similar ANSI standard.

We plan to meet again at the next ASA meeting.

Sincerely,

Bob Krug, Chair S1/WG17

Report on the second meeting of the Working Group on Standards in Underwater Acoustics (S1/WG23), 5 October 1993, Denver

Since the inaugural meeting at New Orleans, the working group has assembled a substantial collection of published material on standards in underwater acoustics. This material includes U. S. government guidelines and industry reports. Most of the information is available as hard copy but some is on floppy disk.

At the second meeting of the working group, held on 5 October 1993 during the ASA meeting at Denver, the published material was reviewed. It was recognized that, although many of the published documents would be extremely valuable to the underwater acoustics community, they are for the most part out of print or not readily available for other reasons. A solution to the problem, which the working group recommends, is publication of these documents by the ASA through the AIP, provided of course that copyright issues could be resolved.

Meanwhile, the working group is continuing with its examination of issues concerning standards in underwater acoustics. It recognizes the magnitude of the task, and is currently formulating a procedure for dealing with the problem, which will be reported in due course. Also, a document is in preparation which will contain basic definitions relevant to underwater acoustics. Discussions between working group members will continue outside the bi-annual structure of the ASA meetings, with a view to completing our compendium of basic definitions in a timely fashion. We will assemble next at the ASA meeting planned for Cambridge in June 1994.

Michael J. Buckingham
Chairman, S1/WG23
5 October 1993

• IEC/TC 29 ELECTROACOUSTICS

U.S. Technical Advisor: V. Nedzelnitsky

Documents processed by the ASA Standards Secretariat from April through September 1993.

The following documents were received for VOTE AND/OR COMMENT by the U.S. Member Body:

Coordinator	TAG	CENTRAL OFFICE (CO) DOCUMENTS
J. Tichy V. Nedzelnitsky	S1/S12	IEC/TC 29 (Central Office) 185 - Draft IEC 1043: Electroacoustics - Instruments for the Measurement of Sound Intensity. Measurements with Pairs of Pressure Sensing Microphones.

announced to S1 and S12 (S1/381) on 29 March 1993. The U.S. position, AFFIRMATIVE WITH COMMENTS, was submitted to ANSI on 13 August 1993.

R.W. Krug	S1/S12	IEC/TC 29 (Central Office) 203 - Draft IEC 651: Amendment 1: Sound Level Meters.

announced to S1 and S12 (S1/385) on 14 May 1993. The U.S. position, NEGATIVE WITH COMMENTS, was sent to USNC by the Technical Advisor on 29 July 1993, and from USNC to IEC on 31 July 1993.

Coordinator	TAG	CENTRAL OFFICE (CO) DOCUMENTS
R.W. Krug	S1/S12	IEC/TC 29 (Central Office) 204 - Draft IEC 804: Amendment 2: Integrating-Averaging Sound Level Meters.

announced to S1 and S12 (S1/386) on 14 May 1993. The U.S. position, NEGATIVE WITH COMMENTS, was sent by the Technical Advisor on 29 July 1993, and from USNC to IEC on 31 July 1993.

A.H. Marsh	S1	IEC/TC 29 (Central Office) 167 - Draft IEC 1183 Random-incidence and diffuse-field calibration of sound level meters.

announced to S1 (S1/393) on 25 August 1993.

V. Nedzelnitsky	S1	IEC/TC 29 (Secretariat) 256 1st CD: Measurement Microphones. Part 3: Primary method for free-field calibration of Laboratory Standard Microphones by the reciprocity technique.

announced to S1 (S1/383) on 23 April 1993. The U.S. position was sent to USNC from the Technical Advisor on 14 June 1993.

D.A. Preves	S3	IEC/TC 29 (Secretariat) 252 Second CD 118-1: Hearing Aids with induction pick-up coil input audiometry.

announced to S3 (S3/363) on 8 March 1993. The U.S. position, ABSTENTION WITH COMMENTS, was submitted to L. Nielsen from USNC on 4 May 1993.

R.L. Grason	S3	IEC/TC 29 (Secretariat) 253 IEC 654-4: Audiometers Part 4: Equipment for extended high frequency audiometry.

announced to S3 (S3/364) on 8 March 1993. The U.S. position, AFFIRMATIVE WITH COMMENTS, was submitted to USNC by the Technical Advisor on 26 April 1993, and from USNC to L. Nielsen on 4 May 1993.

Coordinator	TAG	SECRETARIAT DOCUMENTS
C. Bautz	S1/S12	IEC/TC 29 (Secretariat) 261 Electroacoustics - Instruments for Measurement of Aircraft Noise, etc.

announced to S1 (S1/390) on 30 July 1993.

OTHER ACTIONS

New Work Items proposed for IEC/TC 29:

- IEC/TC 29 (U.K.) 105
  Proposal from the British Committee for an addition to the IEC 118 series of hearing aid standards.

- IEC/TC 29 (U.K.) 106
  Extension of EMC Measurements to cover the region 20 to 900 Hz for checking immunity of hearing aids.

- IEC/TC 29 (U.K.) 107
  Addendum to IEC 118-0 to cover the measurement of immunity of hearing aids from electromagnetic interference.

Affirmative votes with comments on the three above items, were submitted to the USNC for IEC by the U.S. Technical Advisor on 20 July 1993.

NIST
UNITED STATES DEPARTMENT OF COMMERCE
National Institute of Standards and Technology
Gaithersburg, Maryland 20899

COMMITTEE CORRESPONDENCE Building 233 (Sound), Room A147

October 1, 1993

REPORT TO: ASACOS, TAG for TC 29 Electroacoustics, and other directly and materially interested parties

From: Victor Nedzelnitsky, Sc.D. VN
Technical Advisor to USNC/IEC
for TC 29 Electroacoustics

SUBJECT: Activities concerning IEC/TC 29 since the previous report of the Technical Advisor

1. Published copies of IEC International Standard 1252 Electroacoustics - Specifications for personal sound exposure meters, First edition 1993-06, have been received by USNC/IEC. This Standard can be purchased at $70.00 per copy, plus shipping and handling, from USNC/IEC, 11 West 42nd Street, New York, NY 10036, telephone 212-642-4936, FAX (for sales only) 212-302-1286.

2. Documents received and/or processed for ballot or comment are announced via the ASA Standards Secretariat and are listed separately in the ASACOS/S1/S3 Minutes. Consequently, a list is not repeated in this report.

3. The USNC/IEC ExCo had set up an *ad hoc* committee, chaired by Dr. Stanley I. Warshaw of NIST, to examine ways in which the USNC/IEC and ANSI can act to increase U.S. user (as opposed to "producer", e.g., manufacturer) participation in its standards activities. Among many others, I was offered the opportunity to provide suggestions, and did so (copy was attached to my January 25, 1993 report to ASACOS, to the TAG for TC 29, and to others, including a copy of a letter to me from Dr. Kruger that illustrates the lack of U.S.A. support for participation by users, even those who serve as Chairs/Conveners of IEC WGs). This committee has issued its report (copy attached). Also attached is the related excerpt (title page and pages 17 and 18) of USNC 270 August 30, 1993, the Minutes of the USNC/IEC Executive Committee Meeting in Vancouver, British Columbia, at which this report was presented and discussed. There was some discussion of this report by the USNC/IEC ExCo at its meeting at NIST in Gaithersburg on September 28, 1993.

4. Also considered at this USNC/IEC ExCo meeting was USNC 2271 Attachment O, a letter from George T. Willingmyre, P.E., Vice President Washington Operations, ANSI, to which he attached for

discussion the document "INTERNATIONAL STANDARDS ISSUES, a Statement to the Secretary of Commerce by the Visiting Committee on Advanced Technology of the National Institute of Standards and Technology, July 28, 1993." A copy is attached.

cc:
D. G. Eitzen
R. C. Geiseman
S. I. Warshaw
C. T. Zegers

Attachments.

U.S. NATIONAL COMMITTEE OF THE IEC

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212.302.1286 (Sales Only)
Cable: Standards, New York
International Telex: 42 42 96 ANSI UI

USNC 270
August 30, 1993

MINUTES
USNC/IEC Executive Committee Meeting
Tuesday, July 22, 1993
Hyatt Regency Hotel
Vancouver, British Columbia

Members Present	Position	Affiliation
R.H. Reimer	President	Allen-Bradley Co.
M.E. Cox	Member	UL
F. Finnegan	Member	Texas Instruments
D.C. Fleckenstein	Member (Immediate Past President)	IEEE
R.C. Geiseman	Member	Micro Switch
E.R. Kelly	Vice President	AMP Inc.
J.M. Kinn	Member	EIA
B. Liebler	Member	HIMA
C.R. Luebke	Member	Square D Co.
P.M. Piqueria	Member	General Electric Co.
J. Rennie	Member	Factory Mutual Research
R.M. Showers	Vice President	Univ. of Pennsylvania
C.T. Zegers	Secretary	ANSI
Guests		
R.H. Arendt	TA - TC 32/SC 32A	-
G.W. Carter	TA - Chmn - TC 75	MEC Inc.
G.R. Dauberger	TA - SC 23A	Thomas & Betts Corp.
W. Dettwiler	VP, Canadian National Committee/IEC	MacDonald & Dettwiler
J.W. Esty*	Rep IEEE Power Engineering Society	S&C Electric Co.
J. Gorman	-	IEEE Staff
T.A. Pinkham	TA - TC 36/SC 36B/SC 36C	Lapp Insulator Co.
A. Shpilman*	TA - TC 51	Philips Components
J.M. Van Name Jr.*	TA - Chmn/TC - TC 78 - DTA/TC 11	-
C.H. White	-	NEMA
Members Absent		
A.R. Daniels	Member	NCR Corp.
W.F. Hanrahan	Member	CBEMA
F.K. Kitzantides	Vice President	NEMA
E.M. Nesvig	Member	ERDCO Engineering Co.
S.I. Warshaw	Member	NIST/U.S. Dept. of Commerce
J.T. Weizeorick	Member	AHAM

*Part time

It was moved, and seconded

That based on the NEMA proposal the Executive Committee extend an official invitation to TC 17 and its Subcommittees (A, B, C and D) to hold their 1995 meeting in the U.S.

During discussion Mr. Esty emphasized that Mr. Harner's proposal did not intend to exclude SC B and D and that the IEEE PES would be willing to provide full financial and administrative support for these meetings in a cooperative approach with other interested organizations such as NEMA, EEI and others.

A long discussion followed in which Mr. Esty emphasized that the primary goal in all this effort is that the meetings be held in the U.S. The details can be resolved. Several members felt that as a "friendly" amendment NEMA should be encouraged to work with all other interests.

It was moved, seconded and

Voted #7

That based on the NEMA proposal the Executive Committee extend an official invitation to TC 17 and its Subcommittees, (A, B, C, and D) to hold their 1995 meeting in the U.S. NEMA is urged to work with all other interests involved to administer these meetings. (This motion was approved with 3 negatives.)

Action Item #6
CRL
TAs/TAGs for TC 17, SCs A, B, C, D

It was confirmed that the TAs and TAGs for the TC and SCs will work out the details of venue and dates and that Mr. Luebke will coordinate the activity so that as soon as possible Mr. Zegers can communicate details to the appropriate international contacts.

15. ANSI Membership Campaign - R.H. Reimer

Mr. Reimer called attention to the list of perspective ANSI members (ATTACHMENT H) and reminded those present that ANSI membership is part of the revenue stream that pays IEC dues and helps to support USNC activities. Mr. Zegers indicated that, in March, Mr. Reimer circulated a special letter to USNC contacts whose employers were not ANSI members inviting them to consider joining the Federation. Five or six did so and the list attached reflects those that remain. Help in encouraging ANSI membership was solicited.

16. Report from USNC Subgroups

16.1 Ad Hoc Committee on User Involvement in USNC/IEC - J. Rennie

Mr. Rennie, reporting for Dr. Warshaw - Committee Chairman, and additional member Mr. Piqueira, called attention to the Report of the USNC Ad Hoc Committee on User Involvement in the USNC/IEC circulated April 23 as ExCo 2244 (ATTACHMENT I).

Using overhead slides (ATTACHMENT J) he highlighted the report and stated the basic conclusion that little is known about the interests represented on TAGs. The Committee suggested 3 areas for action.

a. Funding
b. "Awaken" Senior Management
c. Public Relations

It was suggested that items b and c might be somewhat addressed if the publicity effort is effective. The Committee also felt that if the subject of TAG "balance" was pursued the effort to increase user involvement would be advanced. Its recommendations are as follows:

a. USNC/IEC should adopt guidelines for balance
b. Committee members should define interest
c. TAs need to assure maintenance of balance

During discussion, several members felt that the more correct word to use would be "dominance" rather than "balance". In the ANSI Criteria Document no test of dominance is required unless challenged. Several different opinions were expressed about the definition of the word "user". The same company or organization might be a user in one instance and a producer in another. TAs may have difficulty in classifying TAG members as a result. In answer to questions, Mr. Rennie indicated that the Committee did not consider the possibility of a TAG corresponding membership category via electronic means in order to facilitate users nor did they note the existence of organized "User Associations" in the electrotechnical area.

After discussion, Mr. Reimer suggested that the ANSI Criteria for balance could be reiterated and that a letter could be circulated to TAs attempting to sensitize and remind them of the need for user participation in their activities.

Action Item #7
Ad Hoc Committee

Mr. Rennie agreed that the Ad Hoc Committee would prepare the 1st draft of that letter for circulation by the Secretary. With this item concluded the Ad Hoc Committee would be dissolved.

16.2 Nominating Committee - J. Rennie

No specific items to report.

16.3 U.S. Coordinating Committee on EMC - R.M. Showers

Dr. Showers reported that he was pursuing several possibilities with respect to a Secretariat for the USCCEMC and, in anticipation of resolving this issue, the next meeting has been set for October 7 at NEMA Headquarters.

To: ExCo

John Rennie will give this report formally for Stan Warshaw at the July meeting. Any comments in the meantime should be sent to both. C T Zegers

ExCo 2244
4/23/93 S1/393
ATTACHMENT K-6
USNC 2270
ATTACHMENT I

REPORT OF THE UNECE AD HOC COMMITTEE ON USER INVOLVEMENT IN THE USNC/IEC

Background:

The Executive Committee of the United States National Committee of the IEC appointed the "Ad Hoc Committee on User Involvement in the USNC" at its 31 August 1992 meeting. This Ad Hoc Committee was charged with studying User involvement and with developing recommendations for improving the opportunities for individuals from the User community to become involved in the work of the USNC-IEC. The initial appointments to the Ad Hoc Committee were Dr. Stanley Warshaw, NIST, as Chair; Mr. Philip Piqueira, GE; and Mr. John Rennie, FMRC.

In a letter dated September 4, 1992, Charles T. Zegers, Secretary, USNC/IEC, reported on the formation of the Ad Hoc Committee to the members of the U.S. National Committee and to the Chairs of ANSI's Company Member Council, Organizational Member Council, Government Member Council, Consumer Interest Council, and Executive Standards Council, as well as to the Chair, US TAG for JTC 1. He relayed the Ad Hoc Committee's request for suggestions concerning ways to improve User participation in the USNC/IEC work.

Discussion of Comments Received:

Comments were received from the following seven individuals, identified by their committee affiliations (see numbers in parentheses) for subsequent reference:

(xx) Karen DeChino, IEEE Standards Department
(17) R.H. Harner, S&C Electric Co., TC17 TA
(29) Victor Nedzelnitsky, NIST, TC29 TA
(34) T.A. Pickett, GE, SC34A and SC34B TA
(46) James Tyler, Essex Group, TC46 and SC46 TA
(56) Lawrence Hoffman, Townley and Updike, TC56 TA
(72) Jamie Lankford, TC72 Secretary

Five of these commenters are Technical Advisors (TC or SC) and one is a TC Secretary; the seventh commenter represents a Professional Society/Standards Developer. All appear to be technical people, but it is not clear whether any of them are paid by producers.

The essence of the comments concerning current user participation in USNC/IEC activities is shown below, identified by source:

- o - IEEE committees are balanced. (xx)

  - User members of IEEE committees are generally unresponsive to documents and proposed positions. (17)

- o - Users are heavily represented in the Acoustical Society. (29)

  - The Insulation Cable Engineers Association has an effective working group (TWCSTAC) for users and producers to develop its standards. (46)

- o - The lack of active user participation is painfully obvious. (Stated by most commenters)

  - Efforts to recruit users are generally unsuccessful; user members on TAGs are generally unresponsive to requests for comment on documents and prospective positions. (17)

  - We need mechanisms to strengthen the role of professional societies. (29)

  - Some non-producers participate (e.g., UL and DoD), but do not sustain their interest; others are inactive, information members. (34)

  - Additional user representatives might be sought from Consumers Union, UL, National Safety Council, etc. (56)

  - Some cooperation with GAMA, AGA, UL, plus "presentations" to AHAM provide some help. (72)

- o - Most technical consultants and retirees often donate their time since they lack financial support from their employers, Trade Associations, Professional Societies, or government and frequently must depend on "charity" or resign their positions. (29)

  - USNC and ANSI have unreasonable expectations for (unfunded) technical developments. (29)

The commenters offered suggestions for actions that might be taken, again identified by source:

- * Funding sources must be found:

  - from Trade Associations such as the Edison Electric Institute and EPRI. (72)

  - perhaps from industry/government consortia comparable to EC counterparts; perhaps even from regional groupings under NAFTA. (29)

- * Awaken senior management of users in industry to global events and the importance of standards. (72)

- * Establish a Public Relations program through articles in professional and trade journals, speeches to trade

groups and professional societies, and video tape(s) concerning IEC and USNC activities. However, USNC would have to find the funds to support these. (72)

Ad Hoc Committee Identification of Issues:

After reviewing its charter and the comments described above, the Ad Hoc Committee recognized the reaffirmation that Users may be underrepresented in USNC/IEC activities and the difficulties that may be encountered in attempting to increase User representation. The Committee raised the question whether the amount of User participation is the most important consideration, or whether committees and TAG's have reasonable balance.

In particular, it may be more appropriate to investigate whether individual committees currently meet prescriptions for balance and fairness as specified by ANSI for ISO and IEC activities and by other major organizations. Pertinent extracts from ANSI, ASTM, and ISA documents are reproduced below:

ANSI: The ANSI Board of Directors approved on March 26, 1990, its Procedures for U.S. Participation in the International Standards Activities of the ISO -- Annex B: Criteria for the Development and Coordination of U.S. Positions in the International Standardization Activities of the ISO and IEC.

> *B4.2 Balance. The process of developing U.S. positions should have a balance of interests and shall not be dominated by any single interest category.*
>
> *Dominance means a position or exercise of dominant authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints. The requirement implicit in the phrase "shall not be dominated by any single interest category" normally will be satisfied by the historical criteria for balance; that is 1) no single interest category constitutes more than one third of the membership of a committee dealing with safety standards or 2) no single interest category constitutes a majority of the membership of a committee dealing with product standards.*
>
> *Unless it is claimed by a directly and materially affected person [organization, company, government agency, individual, etc.] that a single interest category dominated the development of a U.S. position, no test for dominance is required.*
>
> *In defining the interest categories appropriate to U.S. TAG membership, consideration shall be given to at least the following:*
>
> *1. Producer*
> *2. User*
> *3. General interest*
>
> *Where appropriate more detailed subdivisions should be considered.*

ASTM: ASTM's Regulations Governing ASTM Technical Committees, September 1982

> *7.1.1 On classified committees, a member shall be classified by the Executive Subcommittee, at the time his application is accepted, according to his individual or organizational interest.*

7.1.2 Classification of committee members by organizational and technical interest is needed to ensure fairness and balance among affected interests in keeping with Society Bylaw 7.1.2. Such classification may be the same or different at main committee and subcommittee levels. It may also be different for committee organizational or standards voting purposes. Classification shall be related to the scopes of the committee and its subcommittees.

7.1.3 Organizational interest is typified by employer, employee, consultant, client, contractor, or sales representative as well as by types of products and services provided. Consultants or other individuals serving more than one kind of interest shall declare their principal interest.

7.3 Classes of Committee Members -- The classes of committee members, unless authorized by COTCO, shall be:

7.3.1 Producer -- A member who represents an organization that produces or sells materials, products, systems, or services covered in the committee scope shall be classified as a producer.

7.3.2 User -- A member who represents an organization that purchases or uses materials, products, systems, or services other than household covered in the committee scope shall be considered as a user provided that the member could not also be classified as a producer.

7.3.3 Consumer -- A member who primarily purchases or represents those who purchase products or services for household use for which a standard is developed.

7.3.4 General Interest -- A member who does not fit into any of the preceding categories.

7.4 Consultants -- A consultant (such as a consulting chemist or engineer or an employee of a consulting firm) retained under an indefinitely continuing arrangement for an organization, which arrangement includes representing it in an ASTM committee, shall be classified in accordance with the classification of the organization by which the member is retained. Consultants representing themselves or their employer and not concerned with the production or sale of the materials, products, systems, or services with which the committee is concerned shall be classified as users or general interests, as appropriate.

7.5 Balance of Interest -- Balance of interest in a committee or subcommittee requires that the combined number of voting user, consumer, and general interest members shall equal or exceed the number of voting producer members.

7.6 Consideration and Review -- Members dissatisfied with their classification may request reconsideration by the Executive Subcommittee. Ultimate appeal may be made to COTCO.

ISA: ANSI-Approved (1992) Standards and Practices Manual of Procedures

3.5.4.1 In recommending appropriate action to the Committee on applications for membership, the Chairperson shall consider the following:

(1) the need for active participation by each interest;

(2) the potential for domination by a single interest category or organization;

(3) the extent of interest expressed by the applicant and the applicant's willingness to participate actively; and

(4) the qualifications of the representative (and the alternate if proposed) identified by the applicant's organization, company, or government agency.

The Chairperson may consider reasonably limits on Committee size.

Committee Recommendations:

- The USNC/IEC Executive Committee should adopt specific guidelines for balance patterned after the ratios prescribed by ASTM, for example, the proviso that no interest group have a majority voice.

- Each member of a USNC/IEC committee or TAG should self-classify his or her interest (as Producer, User, Consumer, or General Interest) subject to appeal by other members.

- Technical Advisors should assume responsibility for assuring that prescribed balance has been maintained; in the event of imbalance, the committee or TAG should be required to take appropriate steps to acquire and maintain balance, preferably by adding members of the underrepresented interest or by withdrawing voting privileges from the most recent members of the overrepresented interest group.

- The Executive Committee should have appeals procedures in place for the resolution of disputes concerning interest classification or committee balance.

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GEORGE T. WILLINGMYRE, P.E.
VICE PRESIDENT
WASHINGTON OPERATIONS

USNC 2271
ATTACHMENT O

August 24, 1993

CMC 93-9/NIST Visit. Comm.

TO: The CMCEC

FROM: George T. Willingmyre, P.E.

RE: International Standards Issues
Attached document--A statement to the Secretary of Commerce by Visiting Committee on Advanced Technology of NIST

Attached is a report on international standards issues recently submitted to the Secretary of Commerce by the NIST Visiting Committee. The report includes four potential recommended actions that NIST had presented to the committee and that the committee supports.

I would appreciate your thoughts on both the issues portion as well as the four recommended actions by September 23. We will solicit input at the October CMCEC meeting as well.

BW/GTW/skh

Attachment

INTERNATIONAL STANDARDS ISSUES

A Statement to the Secretary of Commerce

by the

Visiting Committee on Advanced Technology

of the

National Institute of Standards and Technology

July 28, 1993

U.S. Representation -- Issues and Problems

In 1992 and 1993, the Visiting Committee studied the current international standards situation with particular regard to the following questions:

- How important is a strong U.S. position in international standards to the nation's economic competitiveness in the global economy?
- Is the current U.S. international standards process effective?
- What is NIST's role, and is that role adequate to meet national needs?

Regarding the first question, interested parties in industry, government, and the standards community generally agree that effective participation in international standards affairs is crucial to the strength of the national industrial base and its success in world commerce. A strong U.S. voice is needed to ensure that decisions made by international standards committees include due consideration of technical and economic issues of importance to the United States and to prevent the use of standards and certification practices by other nations as trade barriers to U.S. goods.

As the Office of Technology Assessment concluded in its recent study, "In an information-based global economy, where standards are not only employed strategically as marketing tools but also serve to interconnect economic activities, inadequate support for the standards setting process will have detrimental effects."[1] Historical precedents bear out the importance of U.S. leadership in international standards. In the post-war period, the strong U.S. influence in television equipment and broadcasting standards, pressure vessel codes governing boilers and other commercial and industrial equipment, flow metering standards for petroleum products and natural gas, and in many other areas led to wide-spread formal or de facto adoption of U.S. standards and codes. Unfortunately, the U.S. position in international standards has begun to erode in recent years relative to those of our principal economic competitors.

The question is thus not whether the U.S. should be strongly represented, but how. Leaders in the standards community maintain that the pluralistic U.S. standards system, in which a host of standards organizations have carved out dominant positions in particular technical and

commercial areas, provides adequate representation in international standards affairs.[2] However, many industry observers are critical of the fragmented and often fractious U.S. system and question whether the United States is putting forth its strongest possible effort. Several of us, who work for U.S. corporations with substantial interests in international trade, share these concerns. Among the problems we see is the difficulty in establishing effective interfaces with the monolithic standards systems of other countries. In the eyes of foreign observers and participants from standards systems in which a single entity ultimately represents each nation, the U.S. has no corresponding institution to represent itself.

However, the U.S. system's problems extend beyond difficulties in meshing with its foreign counterparts. It is not clear to us that our international standards representatives, even those who are volunteers from industrial firms, always have the mandate to speak credibly for U.S. industry; more often, they speak as members of the standards community. Nor are the interests of the nation as a whole always represented in an evident way. Finally, because the nation's standards system is connected only weakly to the sovereignty of the land, the link between the organizations that represent the U.S. in the international standards arena and the government agencies that deal with related matters of international commerce and trade agreements is also weak.

A number of policies and strategies have been put forward to improve our nation's effectiveness in international standards. The OTA report describes several options for major change;[3] at our request, NIST discussed the possible future scenarios with us. Several of the proposals to revamp our standards system are worthy of careful consideration. However, after examining the proposals and what would be required to implement them, we conclude that substantive, far-reaching improvement in U.S. participation in international standards requires a consensus among interested parties that currently does not exist. In particular, the problems are unlikely to be fixed until industry speaks with a strong voice. At this time, although many in industry are indeed concerned, there is no broadly based call for improvement. Many companies unfortunately do not fully appreciate the consequences of international standards.

We raise these issues before turning to NIST's present and future role in international standards because they are vital to the nation's economic future and because they define the environment in which NIST functions as the nation's standards and metrology laboratory. Our intention here is not to recommend specific changes in our international standards policies and practices, because the proper course is not clear to us -- nor, except in the broadest outlines, does it seem to be clear to anyone else. Rather, we merely state our belief that ***the difficult tasks of forging a consensus and increasing the effectiveness of U.S. participation in international standards are crucial to our economic prosperity and should be high priorities of our export industries, the Department of Commerce, and U.S. standards organizations.***

NIST's Current Standards Role and Leadership Opportunities

NIST has numerous responsibilities in domestic and international standards, and its role continues to expand and gain in importance in response to technical, commercial, and political developments. NIST's functions in physical standards and measurements are fairly well defined. NIST develops physical standards and carries out the research to support advances in the fundamental units of scientific measurement that underpin them. NIST keeps, fabricates, and sells many physical standards and provides traceability for the bases of standards-related measurements. NIST also accredits laboratories that make measurements of many kinds and works with both the standards community and industry to promote understanding and application of good standards practices.

Inevitably, the growing importance of information technology and its integration into manufacturing have propelled NIST into operating standards and conventions as well, as we discussed in our 1992 annual report.[4] NIST is an important player in developing and implementing PDES/STEP for the digital exchange of product data, government-wide computer protocols to ensure inter-operability of hardware and software, and the Integrated Services Digital Network.

In addition, NIST has a number of legislatively assigned standards-related tasks. NIST was designated by the Department of Commerce as the U.S. inquiry point for the General Agreement on Tariffs and Trade (GATT), a function assigned to the department under the Trade Agreements Act of 1979. Other NIST assignments include accreditation of all U.S. laboratories that make asbestos measurements, direct support to the Consumer Product Safety Commission on fabric flammability, and fastener certification.

Within the standards community, NIST scientists and engineers sit on hundreds of standards committees (and chair many of them) and provide valuable technical input. NIST's director is an ex-officio member of the board of directors of the American National Standards Institute (ANSI).

NIST's role then, is largely technical and educational. NIST is not a major force in standards policy; neither, for that matter, is the Department of Commerce, in the sense of providing strong government leadership and coordination. NIST recently proposed and discussed with us four specific measures to increase its efforts in international standards. We review and comment on each of the proposals in the remainder of this section.

NIST proposes to develop and implement a comprehensive, computerized database of standards-related information for broad dissemination to all interested parties. In a closely related activity, ***NIST also proposes to make standards documents available to the requesting public under arrangements with copyright holders.*** NIST's goal is to improve the currency of standards information through electronic communication. NIST envisions providing on-line access to world-wide, standards-related information, including bulletins on standards development schedules, standards meetings of interest, and standards voting. In conjunction with the NIST Computer Systems Laboratory, the Office of Standards Services at NIST proposes to develop the technology needed to offer documents to the public electronically and to circulate developmental drafts of standards for comments and revision by standards committee members. Once this program is established, NIST proposes to work in collaboration with the National

Technical Information Service, which will serve as a central distributors, providing finished electronic documents to the public and collecting fees from them for the participating standards organizations.

Although individual standards associations provide some of the services contained in these two proposals to their own constituents, such information is limited and currently unavailable to a broad audience. NIST reports that U.S. standards bodies generally support the establishment of a central data bank; however, as the OTA report observes, some in the standards community will probably oppose a greater federal role in its development.[5] While some may regard NIST's proposal as government encroachment, we believe that NIST is a logical place for a federally funded, national electronic standards database and that such a database could be of considerable value to our nation's industrial firms. This is an activity for which NIST, with its unique combination of standards, database, and computer expertise, is eminently qualified. Furthermore, the maintenance and operation of a comprehensive and widely available database is probably beyond the financial and operational capability of any individual standards body.

Two cautionary notes are in order. First, we recommend that NIST work closely with the major U.S. standards organizations in designing and implementing its standards information network with the goal of maximum "buy-in" among them. A national standards database must be supported and used by the standards community to be effective. Second, the Department of Commerce must be prepared to commit to reliable, long-term funding if the database is to be accepted by the potential user base.

NIST's proposals have the advantage that they would allow many firms and organizations to be brought into the standards information loop quickly and easily. These new activities seem to us to complement NIST's charge to serve as the GATT inquiry point as well as its appointment by ANSI as the domestic focal point for ISONET, an information network on ISO standards. We also note that, while the information to be compiled and disseminated by NIST will come from both the private sector and government, these proposals are consistent in spirit and intent with the Administration's stated aim to "make government information available to the public in a timely and equitable manner."[6]

NIST proposes to ***expand the Standards Assistance Program, in which standards experts assigned to U.S. embassies around the world promote acceptance of U.S. standards, conformity assessment procedures, legal metrology concepts, and technology.*** Under the Standards Assistance Program, NIST now maintains two standards representatives: one in Brussels to the European community and another to Saudi Arabia. NIST's priorities for placing additional foreign standards representatives are based on economic analyses indicating that representatives would be most useful in Russia, Mexico, and Japan.

The importance of cooperation with other nations in standards development is well illustrated by the case of Saudi Arabia. The Standards Assistance Program in Saudi Arabia began in 1989 in response to the deteriorating U.S. business position in Saudi Arabia and neighboring gulf states. Many pre-1989 Saudi product standards, developed with assistance from our major economic competitors including Japan, the United Kingdom, and Germany, were incompatible

with U.S. products. A 1991 study by the U.S. Embassy to Saudi Arabia estimated the resulting decrease in export opportunities as $100 million to $500 million annually.[7]

U.S. representation in Saudi Arabia under the Standards Assistance Program has been successful in helping the U.S. to reclaim business in Saudi Arabia and other members of the Gulf Cooperation Council, which generally follows the Saudi technical standards practices. Since the program began, Saudi Arabia has promulgated no standards incompatible with U.S. products, and the program is making an effort to revise incompatible standards developed earlier. In addition, the U.S. standards advisor and NIST staff have processed more than 450 draft Saudi standards and provided the Saudis with over 300 sets of comments from U.S. organizations. The U.S.-Saudi Arabian agreement was extended most recently in a March 1993 memorandum of understanding.

The current Saudi Arabian program was created by NIST with the driving force and collaboration of the American/Saudi Roundtable, an association of U.S. companies with business interests in Saudi Arabia. Public-private cooperation began with the private sector supporting the standards advisor at the U.S. embassy in Riyadh and NIST providing the standards dissemination and review system. NIST currently also underwrites the standards advisor, with the Roundtable providing in-kind support, i.e., technical and business expertise and representation.

We recommend that the pattern of public-private cooperation be continued as the Standards Assistance Program expands to other nations. NIST, as the standards arm of the Department of Commerce and a rich source of standards and technical expertise, is the obvious federal partner. The management of organized, private sector participation is less clear. In Saudi Arabia, the mechanism was straightforward because a formal association of U.S. companies with business interests there was in place and ready to participate (and, at least initially, to commit to monetary support). Generally, such a convenient situation cannot be expected elsewhere. As a result, we recommend that the Department of Commerce seek a working alliance with a national standards or industrial organization that can and will agree to represent industry broadly in the Standards Assistance Program.

Such a partnership might be forged through a Memorandum of Understanding (MOU) between the Department of Commerce and, for example, the American National Standards Institute. Under such an arrangement, the Department's responsibilities would center on NIST's technical reviews, advice, and support, as it does now. The designated private sector organization would represent U.S. firms, either directly through their memberships or indirectly through the memberships of industrial associations to which they belong. Its responsibilities would include holding workshops and using other means to ensure that the interests of key firms and industrial sectors were represented; arranging formal participation by U.S. companies and their representatives in Standards Assistance Program activities; and funding the standards advisors assigned to U.S. embassies, e.g., through assessments of companies and associations.

Regarding financing, however, we observe that the division of financial responsibility between the federal government and the private sector is less important than ensuring that U.S. commercial interests are well represented and that U.S. industry takes an active part in the program. In short, the participation of U.S. business and its in-kind support is more important than

monetary contributions. Corporate participation in setting up and operating new standards assistance activities will help to focus them on subjects of greatest commercial importance, ensure that decisions made truly benefit U.S. companies, and generate contacts and build experience that will be valuable to U.S. exporters.

Finally, NIST proposes to ***establish a funding mechanism to ensure effective U.S. representation and to coordinate private sector and government participation in international standardization activities.*** Under this proposal, NIST would administer a block of congressionally appropriated funds to support the participation of individuals and organizations needed to represent the United States in international councils. As we see it, this program has two primary objectives: (1) to ensure that the U.S. is represented in those international councils where need and opportunity make participation crucial to our national economic interests, and (2) to ensure that our representatives to those councils are the highest caliber we can find.

NIST intends to satisfy those objectives in a formal, three-step review procedure. NIST would administer the selection and funding to ensure due process. One of NIST's primary responsibilities and, we think, major challenges, will be to select reviewers from NIST, industry, the standards community, and other entities in a way that treats diverse and potentially competing interests in a manner that is, and is perceived to be, fair. However, NIST already has experience on which it can draw in setting up the review process: its Advanced Technology Program already has a proposal review system that has had to address many of the same concerns. We recommend that NIST give the structure and operation of the review process considerable thought, because the success of this proposal may well depend on it.

As NIST outlined it to us, the review process would begin with submission of proposals from U.S. standards organizations to represent the nation in specific international standards councils. To ensure that knowledgeable, well-qualified people are selected, the delegates themselves would be chosen by technology advisory groups that are formed and operate under the auspices of the relevant standards organizations.

In the first review, technical experts familiar with international standards issues would evaluate proposals in terms of the need for U.S. participation and the importance of the technical issues to be addressed. The second review, conducted by trade and industry reviewers, would rank the proposals in importance based on economic and business criteria. In a final review, the evaluations from both the first and second reviews would be factored into a final ranking, and the top-ranked proposals would be funded.

The OTA report notes that foreign governments generally support, at least in part, the cost of participation in international standards development activities, while U.S. delegates pay their own way.[8] As a result, U.S. representation in international standards is often determined by who can afford to attend meetings; it should be determined by who is best qualified. Participation in certain crucial technology areas where a U.S. voice is essential may be particularly expensive. We believe that NIST's proposal is a reasonable solution to the pressing need for expert representation in key international standards councils.

Recommendations

NIST is effectively supporting and participating in the nation's international standards effort. We think that NIST also has opportunities to do more in the face of a clear national need. ***We recommend that the Department of Commerce support all four of NIST's international standards initiatives to:***

- ***establish a standards database***
- ***develop a standards information network***
- ***expand the Standards Assistance Program***
- ***fund participation by U.S. experts in key international standards activities***

In our opinion, NIST is ideally suited to manage the first two proposals. The institute has considerable experience in developing and disseminating databases, and its access to in-house computer systems and network expertise is unmatched elsewhere in the standards community.

The Standards Assistance Program has already demonstrated the economic value of timely input into the standards processes of other nations. We believe that extension of this program to other key trading partners such as Russia and Japan is a pro-active step to promote U.S. economic interests. The current public-private partnership between NIST and industry is a good model to continue. To ensure that this partnership works effectively, we recommend that the Department of Commerce seek an agreement with a nationally recognized standards or industrial organization that will pull together diverse industrial and standards community interests in the Standards Assistance Program. With such a partnership, NIST can expand the Standards Assistance Program and encourage cooperation within the nation's standards system at the same time.

We also like NIST's proposal for funding highly qualified U.S. participants in key international standards committees. A fund to plug critical holes in our representation with experts selected on the basis of merit can certainly strengthen the U.S. presence. NIST's standards expertise and its frequent role as a neutral third party make it an excellent choice to administer this program.

We recommend that NIST's proposals be funded in full. The proposals will cost several million dollars per year. At a time when economic security is replacing military security as the primary foreign policy issue, NIST's proposals to upgrade our effectiveness in international standards are small but significant contributions to our national goal of increased success in the world economy. In that broader context, we believe that the modest investment that NIST proposes has the potential for excellent returns in international commerce and increased cooperation in the U.S. standards community.

Summary

NIST has proposed four useful programs to increase U.S. effectiveness in international standards. While we believe that there is an underlying need for systemic change in our nation's approach to standards, it appears that such change will be difficult and long in coming. In the meantime, NIST's proposed programs can improve our international standards representation and help to bring order to the currently chaotic U.S. standards system. We encourage the Department of Commerce to back them and to provide the resources to carry them out.

References

1. U.S. Congress, Office of Technology Assessment, *Global Standards: Building Blocks for the Future*, TCT-512 (Washington, DC: U.S. Government Printing Office, March 1992), p. 9. Note: We recommend this report as an excellent source of information on international standards.

2. Ibid, p. 3. See especially footnote 1.

3. Ibid, pp. 21-35.

4. The Visiting Committee on Advanced Technology, 1992 Annual Report, January 1993, pp. 19-21.

5. U.S. Congress, op. cit., p. 28.

6. President William J. Clinton and Vice President Albert Gore, Jr., *Technology for America's Economic Growth, A New Direction to Build Economic Strength*, February 22, 1993, p. 20.

7. U.S. Congress, op. cit., p. 36.

8. U.S. Congress, op. cit., p. 81.

* *

The Visiting Committee on Advanced Technology of the National Institute of Standards and Technology was established by the Omnibus Trade and Competitiveness Act of 1988. The committee, in its role as principal private sector advisor to NIST, reviews and makes recommendations regarding the general policy, organization, budget, and programs of the institute.

THE VISITING COMMITTEE ON ADVANCED TECHNOLOGY
1993

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S1/393
ATTACHMENT L-1

ISO/TC 43 ACOUSTICS and ISO/TC 43/SC1 NOISE

U.S. TAG Chair: H.E. von Gierke
U.S. TAG Vice Chair: P.D. Schomer

Documents processed by the ASA Standards Secretariat from May 1993 through September 1993

The following documents were received for VOTE AND/OR COMMENT by the U.S. Member Body:

Technical Coordinator	TAG	DRAFT INTERNATIONAL STANDARDS (DIS)
R. Lotz	S12	ISO/DIS 10302: Acoustics - Measurement for the measurement of airborne noise emitted by small air-moving devices.

announced to S12 (S12/270) on 27 April 1993. The U.S. position, AFFIRMATIVE WITH COMMENTS, was submitted to ANSI on 30 July 1993, and from ANSI to ISO on 4 August 1993.

A. Konheim	S12	ISO/DIS 3095: Acoustics - Measurement of noise emitted by railbound vehicles.

announced to S12 (S12/267) on 16 March 1993. The U.S. position, AFFIRMATIVE WITH COMMENTS, was submitted to ANSI on 16 June 1993, and from ANSI to ISO on 21 June 1993.

Technical Coordinator	TAG	DRAFT INTERNATIONAL STANDARDS (DIS)
R.F. Schumacher	S12	ISO/DIS 6798: Acoustics - Test code for the measurement of airborne noise emitted by reciprocating internal combustion engines. Engineering method and survey method.

announced to S12 (S12/271) on 27 April 1993. The U.S. position, AFFIRMATIVE WITH COMMENTS, was submitted to ANSI on 19 July 1993, and from ANSI to ISO on 23 July 1993.

S.I. Roth	S12	ISO/DIS 11200: Acoustics - Noise emitted by machinery and equipment. Guidelines for the use of basic standards for the determination of emission sound pressure levels at the work station and at other specified positions.

announced to S12 (S12/272) on 30 April 1993. The U.S. position, NEGATIVE WITH COMMENTS, was submitted to ANSI on 16 July 1993, and from ANSI to ISO on 23 July 1993.

S.I. Roth	S12	ISO/DIS 11201: Acoustics - Noise emitted by machinery and equipment. Measurement of emission sound pressure levels at the work stationand at other specified positions. Engineering method in an essential free field over a reflecting plane.

announced to S12 (S12/273) on 30 April 1993. The U.S. position, NEGATIVE WITH COMMENTS, was submitted to ANSI on 16 July 1993, and from ANSI to ISO on 23 July 1993.

Technical Coordinator	TAG	DRAFT INTERNATIONAL STANDARDS (DIS)
S.I. Roth	S12	ISO/DIS 11202: Acoustics - Noise emitted by machinery and equipment. Measurement of emission sound pressure levels at the work station and at other specified positions. Survey method in situ.

announced to S12 (S12/274) on 30 April 1993. The U.S. position, NEGATIVE WITH COMMENTS, was submitted to ANSI on 16 July 1993, and from ANSI to ISO on 23 July 1993.

S.I. Roth	S12	ISO/DIS 11203: Acoustics - Noise emitted by machinery and equipment. Determination of emission sound pressure levels at the work station and at other specified positions.

announced to S12 (S12/275) on 30 April 1993. The U.S. position, NEGATIVE WITH COMMENTS, was submitted to ANSI on 16 July 1993, and from ANSI to ISO on 23 July 1993.

S.I. Roth	S12	ISO/DIS 11204: Acoustics - Noise emitted by machinery and equipment. Measurement of emission sound pressure levels at the work station and at other specified positions. Method requiring environmental corrections.

announced to S12 (S12/276) on 30 April 1993. The U.S. position, NEGATIVE WITH COMMENTS, was submitted to ANSI on 16 July 1993, and from ANSI to ISO on 23 July 1993.

Technical Coordinator	TAG	DRAFT INTERNATIONAL STANDARDS (DIS)
S.I. Roth	S12	ISO/DIS 12001: Acoustics - Noise emitted by machinery and equipment. Rules for the drafting and presentation of a noise test code.

announced to S12 (S12/277) on 30 April 1993. The U.S. position, NEGATIVE WITH COMMENTS, was submitted to ANSI on 16 July 1993, and from ANSI to ISO on 23 July 1993.

R.M. Guernsey	S12	ISO/DIS 11691: Acoustics - Measurements of insertion loss of ducted silencers without flow. Laboratory survey method.

announced to S12 (S12/266) on 16 March 1993. The U.S. position, ABSTENTION WITHOUT COMMENTS, was submitted to ANSI on 28 July 1993, and from ANSI to ISO on 30 July 1993.

P.C. Shang	S12	ISO/DIS 2923: Measurement of noise on board vessels.

announced to S12 (S12/282) on 30 June 1993. The U.S. position, ABSTENTION WITHOUT COMMENTS, was submitted to ANSI on 23 September 1993.

D. Nelson	S12	ISO/DIS 11957: Acoustics - Determination of sound insulation performance of cabins, Laboratory and in situ measurements.

announced to S12 (S12/283) on 26 July 1993. The U.S. position, AFFIRMATIVE WITH EDITORIAL COMMENTS, was submitted to ANSI on 3 September 1993.

DOCUMENTS CIRCULATED AD/HOC

DOCUMENT	TITLE	COORDINATOR(S)	U.S. TA
ISO/DIS 9611.2	Acoustics - Characterization of sources of structure-borne sound with respect to the airborne sound radiation of connected structures - Measurement of velocity at the contact points of machinery when resiliently mounted	A. Kilcullen	S12

sent to A. Kilcullen on an ad hoc basis (S12 Ad-Hoc #2) on 7 June 1993. The U.S. position, AFFIRMATIVE WITH COMMENTS, was submitted to ANSI on 14 July 1993, and from ANSI to ISO on 23 July 1993.

ISO/CD 11688-1	Acoustics - Recommended practice for the design of low-noise machinery and equipment. Part 1: Planning	S. Roth	S12

sent to S. Roth on an ad hoc basis (S12 Ad-Hoc #3) on 11 August 1993. The U.S. position, AFFIRMATIVE WITH COMMENTS, was submitted to ANSI on 13 September 1993.

ISO/CD 11690-3	Acoustics - Recommended practice for the design of low-noise workplaces containing machine Part 3: Sound propagation and noise prediction in workrooms.	B. Brooks	S12

sent to B. Brooks on an ad hoc basis (S12 Ad-Hoc #4) on 12 August 1993. The U.S. position, AFFIRMATIVE WITH COMMENTS, was submitted to ANSI on 13 September 1993.

DOCUMENTS CIRCULATED AD/HOC
(continued)

DOCUMENT	TITLE	COORDINATOR(S)	U.S. TAG
ISO 6393:1985	Acoustics - Measurement of airborne noise emitted by earth-moving machinery - Method for determining compliance with limits for exterior noise - Stationery test condition.	L.A. Jennings	S12
ISO 6395:1988	Acoustics - Measurement of exterior noise emitted by earth-moving machinery - Dynamic test condition.	L.A. Jennings	S12

a) Both documents were sent to L.A. Jennings on an ad hoc basis (S12 Ad-Hoc #5 & #6) on 12 August. The U.S. position, AFFIRMATIVE, for the work effort was submitted to ANSI on 12 August 1993.

b) The U.S. position on the two documents, AFFIRMATIVE, was submitted to ANSI on 23 September 1993.

ISO/TC 43/SCI — R.F. Schumacher — S12
Draft Amendments:
ISO 362:1981/DAM 2
ISO 7188:1985/DAM 1

These two documents were sent to R.F. Schumacher on an ad hoc basis (S12 Ad-Hoc #7) on 14 September 1993.

OTHER ACTIONS:

- ISO/TC 43 and ISO/TC 43/SC1 Noise

1) U.S. response on questions regarding two ISO standards - ISO 9613-1: 1993 and ISO 9614-1: 1993

The U.S. responded to the questionnaires on the two ISO standards noted above, on 23 September 1993.

June 28, 1993 standard\oslo.rpt

Report on ISO TC 43 and TC 43/SC1 Meeting in Oslo 30 May through 3 June 1993 and S12 Planning

I. Meeting of TC 43/SC 1

1. Resolutions and Plenary Materials.

Resolutions passed by TC 43/SC 1 are included (N 893--inc. 1) with pen changes as indicated. Two new proposals for work items (N889 and N890, incs. 2 and 3) were approved for formal circulation to member bodies. Items from the package of materials used at the plenary meeting can be made to anyone who wants a particular item.

2. US Participation.

The US had by far the largest delegation at the meeting. This large US presence facilitated enhanced US input to the various working group meeting. In particular, US participation was very positive and substantial in the areas of vehicle noise (standard road surfaces and their measurement, barriers, and other issues), sirens, sound intensity, impulse noise measurement, and sound propagation. Reports from some of the working group meetings are included.

3. Important Results

a. The S12 Committee suggested that several of the proposed ISO Standards should be technical reports rather than standards. This position was accepted by TC43/SC 1. Many other counties had similar sentiments.

b. The US will provide the conveners for two new efforts. One will deal with motor vehicle noise. Dick Schumacher of GM will be the convener. The second, if approved, will deal with community noise assessment and Paul Schomer will be the convener.

c. The use of sound exposure has been retained as a general terms and will not be limited to worker exposure.

d. A Danish proposal to revise C-weighting was accepted for ballot as a new work item. The US must appose the effort since many present ANSI standards depend on the present C-weighting. Canada and New Zealand also vigorously appose this item. If approved, the US must find a strong individual to be a member of this working group.

4. US/Canadian Coordination

The US and Canada worked closely to support each other during the meeting. This enhanced the influence of both countries at the meeting. This coordination should be expanded.

5. S12 Actions

a. S12 continues to bear the largest burden with respect to ISO. Of the more than 60 documents underway, about 55 relate to S12. Therefore, for the foreseeable future, S12 planning must focus primarily on meeting the ISO challenge. The new S12 structure which divides into several technical areas is helping to meet this challenge.

b. The biggest future challenge is to develop methods to concurrently ballot documents for US and ISO. We need to find and expedite ways to adopt ISO Standards as ANSI (or other member body) Standards.

P.D. Schomer
U.S. TAG for ISO/TC 43 and
ISO/ TC 43/SC1

S1-393
ATTACHMENT N-1

ACOUSTICAL · SOCIETY · OF · AMERICA

OFFICE OF THE
STANDARDS SECRETARIAT

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STANDARDS MANAGER

335 EAST 45TH STREET, NEW YORK, NEW YORK 10017-3483

Telephone (212) 661-9404
Telex 960983 AMINSTPHYS NYK
Telefax (212) 949-0473

17 September 1993

TO: G.S.K. Wong, Chair S1

Re: Letter Ballot LB/S1/388 sent to Accredited Standards Committee S1 on 20 July 1993 and closed on 7 September 1993

SUBJECT: Approval of reaffirmation of three (3) Standards, given in ATTACHMENT A

Enclosed please find tally of the above letter ballot, showing results as follows:

		CLASSIFICATION OF MEMBERS	
AFFIRMATIVE VOTES	11	P - PRODUCER	4
NEGATIVE VOTES	0	C - CONSUMER	6
ABSTENTIONS	0	G - GOVERNMENT	5
NOT RETURNED	6	GI - GENERAL INTEREST	2
TOTAL	17	TOTAL	17

NOTE:

It was learned, subsequent to this ballot, that ANSI S1.42-1986 was reaffirmed by ANSI on 6 March 1992. (ANSI S1.42-1986 (R 1992)). Therefore, there is no need to reaffirm ANSI S1.42-1986 at this time.

9/17/93

COPIES OF ALL COMMENTS ARE ATTACHED

Continuation of results of letter ballot S1/388:

AFFIRMATIVE VOTES:

Anderson, R.	Larson/Davis Laboratories
Arrington, J.	U.S. Army Primary Standards Laboratory
Augspurger, G.L.	National Council of Acoustical
Alternate	Accountants
Fung, T.	U.S. Army Communication Electronics Command
Garinther, G.	U.S. Army Human Engineering Laboratory
(Alternate)	
Mayer, M.S.	AT&T
Patterson, J.H.	U.S. Army Aeromedical Research Laboratory
Schomer, P.D.	U.S. Army Construction Engineering Research Lab.
Schomer, P.D.	Acoustical Society of America
Schontal, P.D.	Bruel & Kjaer Instruments, Inc.
Sepmeyer, L.W.	Audio Engineering Society

NEGATIVE VOTES:

None

ABSTENTIONS:

None

Continuation of results of letter ballot S1/388:

NOT RETURNED:

Bohl, C.D.	American Industrial Hygiene Association
Linderoth, L.F.	Sonetronics, Inc.
Lotz, R.	Computer & Business Equipment Manufacturers Association
McKinley, R.	U.S. Department of the Air Force
Nedzelnitsky, V.	National Institute Standards and Technology
Wang, S.	Air-Conditioning & Refrigeration Institute

LATE RESPONSE:

Sepmeyer, L.W.	Audio Engineering Society

Avril Brenig
Standards Manager

cc: Vice Chair, Standards Committee
Chair and Vice Chair, ASACOS

S1/393
ATTACHMENT N-4

ACOUSTICAL · SOCIETY · OF · AMERICA

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IMMEDIATE RETURN REQUESTED

LB/S1/388
20 July 1993

Return to: Letter Ballot Department
Due date: 7 September 1993

ADMINISTRATIVE LETTER BALLOT
ACCREDITED STANDARDS COMMITTEE
ON ACOUSTICS, S1

FOR ACTION

Topic: Approval of reaffirmation of three (3) S1 Standards [illegible] ATTACHMENT A

Approved by: G.S.K. Wong, Chair S1

Distributed by: [illegible], ASA Standards Manager

Reference Document(s):

ATTACHMENT A Lists the three (3) S1 standards proposed for reaffirmation by S1

Background Information:

Section 4.4 of the ANSI Procedure for Development and Coordination of American National Standards requires that each complete American National Standard (including its supplements and addenda) be reviewed at least every five years to determine whether it should be reaffirmed, revised or withdrawn. Provision is made for extensions of time, except that no extension is granted beyond ten (10) years from the date of approval by ANSI.

The Chair of S1, G.S.K. Wong, recommends that the three (3) standards listed in ATTACHMENT A be reaffirmed.

S1/393
ATTACHMENT N-5

LB/S1/388
ATTACHMENT A
20 July 1993

The three (3) standards listed below are proposed for reaffirmation by S1:

- ANSI S1.11-1986 (ASA 65) American National Standard Specifications for Octave-Band and Fractional-Octave-Band Analog and Digital Filters.
- ANSI S1.20-1988 (ASA 75) American National Standard Procedures for Calibration of Underwater Electroacoustic Transducers
- ANSI S1.42-1986 (ASA 64) American National Standard Design Response of Weighting Networks for Acoustical Measurements

S1/393
ATTACHMENT O-1

ACOUSTICAL · SOCIETY · OF · AMERICA

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17 September 1993

TO: G.S.K. Wong, Chair S1

Re: Letter Ballot LB/S1/389 sent to Accredited Standards Committee S1 on 20 July 1993 and closed on 7 September 1993

SUBJECT: Approval of disbanding of working groups S1/WG 7 Personal dosimeters and S1/WG10 Scales and Ratios for Plotting

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Enclosed please find tally of the above letter ballot, showing results as follows:

		CLASSIFICATION OF MEMBERS	
AFFIRMATIVE VOTES	12	P - PRODUCER	4
NEGATIVE VOTES	0	C - CONSUMER	5
ABSTENTIONS	0	G - GOVERNMENT	5
NOT RETURNED	5	GI - GENERAL INTEREST	3
TOTAL	17	TOTAL	17

Continuation of results of letter ballot S1/389:

AFFIRMATIVE VOTES:

Anderson, R.	Larson/Davis Laboratories
Arrington, J.	U.S. Army Primary Standards Laboratory
Fung, T.	U.S. Army Communication Electronics Command
Garinther, G. (Alternate)	U.S. Army Human Engineering Laboratory
Mayer, M.S.	AT&T
McKinley, R.	U.S. Department of the Air Force
Patterson, J.H. Alternate	U.S. Army Aeromedical Research Laboratory
Schomer, P.D.	U.S. Army Construction Engineering Research Lab.
Schomer, P.D.	Acoustical Society of America
Schontal, P.D.	Bruel & Kjaer Instruments, Inc.
Sepmeyer, L.W.	Audio Engineering Society
Walker, B.E.	National Council of Acoustical Accountants

NEGATIVE VOTES:

None

ABSTENTIONS:

None

Continuation of results of letter ballot S1/389:

NOT RETURNED:

Bohl, C.D.	American Industrial Hygiene Association
Linderoth, L.F.	Sonetronics, Inc.
Lotz, R.	Computer & Business Equipment Manufacturers Association
Nedzelnitsky, V.	National Institute Standards and Technology
Wang, S.	Air-Conditioning & Refrigeration Institute

LATE RESPONSE:

Sepmeyer, L.W.	Audio Engineering Society

Avril Brenig
Standards Manager

cc: Vice Chair, Standards Committee
Chair and Vice Chair, ASACOS

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IMMEDIATE RETURN REQUESTED

LB/S1/389
20 July 1993

Return to: Letter Ballot Department
Due date: 7 September 1993

ADMINISTRATIVE LETTER BALLOT
ACCREDITED STANDARDS COMMITTEE
ON ACOUSTICS, S1

FOR ACTION

Topic: Approval of disbanding of working groups S1/WG7 Personal Dosimeters and S1/WG10 Scales and Ratios for Plotting

Approved by: G.S.K. Wong, Chair S1

Distributed by: Avril Brenig, ASA Standards Manager

Reference Document(s):

Minutes of the S1 meeting (S1/384) held on 20 May 1993 in Ottawa, Canada

Background Information:

At the S1 meeting held on Thursday, 20 May 1993, it was decided to disband S1/WG7 and S1/WG10, respectively, with thanks. The tasks of these working groups have now been completed.

Mr. G.S.K. Wong, Chair of S1, recommends that S1 approve the disbanding of the two working groups, with thanks.

National Research Council Canada
Institute for Microstructural Sciences

Conseil national de recherches Canada
Institut des sciences des microstructures

September 1993

NRC·CNRC

To: D.L. Johnson, Chair S12

From: Gilles Daigle

Subject: Draft Synopses of Standards on the measurement and prediction of sound levels

Copy: Chair of S1;
Vice Chairs of S1 and S12;
Any interested S1 and S12 Committee Member, Individual Expert. WG Chair, and WG Member of S1 and S12

At the S12 meeting during the Ottawa ASA meeting, I was asked to produce a draft synopses of ANSI efforts for the measurement, calculation or prediction of sound pressure levels in air.

I have looked at the ANSI S12.30-1990 - American National Standard Guidelines for the Use of Sound Sower Standards and for the Preparation of Noise Test Codes, as a guide. The details found in ANSI S12.30 is beyond the scope of this draft. I have therefore assembled the following material as a DRAFT and as a summary of my thoughts. In some cases American National Standards already exist while in other cases there is a Working Group preparing a draft Standard.

Committee S1, Acoustics

1) S1/WG2, Attenuation of Sound in the Atmosphere.

Preparation of standards describing recommended procedures to account for the attenuation of sound waves propagating through the atmosphere.

Does this imply attenuation due to molecular absorption alone - more precisely, a Standard to provide a method for calculating the absorption of sound propagating through a still homogeneous atmosphere of humid air of normal composition - and hence aims to revise ANSI S1.26-1978, American National Standard Method for the Calculation of the Absorption of Sound by the Atmosphere.

If not then this Working Group is in conflict with S1/WG20 and S12/WG31,

Ottawa, Canada
Docufax: (613) 957-8734

Canada

2) S1/WG4, Measurement of Sound Pressure Levels in Air

This is a revision of S1.13-1971 (R 1986) Methods for the Measurement of Sound Pressure Levels. This draft standard specifies requirements and provides recommendations for the measurement of sound pressure levels in air at a single point in space.

This is a fundamental standard applicable to a wide range of SPL measurements. The draft standard specifies definitions, types of sounds (temperal and frequency characteristics), types of environment, instrumentation for measuring sound pressure level and the fundamentals of measurement procedures and documentation.

All other standards that involve the measurement of sound pressure levels in air should rely on and refer to this basic fundamental draft standard.

3) S1/WG20, Ground Impedance

i) Measurement of Ground Impedance - to develop a standard describing recommended prodedures to characterize and the instrumentation to measure the acoustic properties of a wide variety of natural ground surfaces outdoors

ii) Attenuation of Sound due to the Ground - to develop a standard describing recommended prodedures to account for the attenuation of sound propagating in the presence of the ground.

This first part of the proposed draft standard is therefore aimed at obtaining the impedance (real and imaginary part) of a variety of grounds as a function of frequency. These values can then be used in conjunction with other standards such as ANSI S12.8 - 1987, American National Standard Methods for Determination of Insertion Loss of Outdoor Noise Barriers or ANSI S12.18 - 199x, proposed American National Standard Method for Outdoor Measurement of Sound Pressure Level. Both recommended methods invoke determination of Ground Equivalence by measurement of the specific impedance of the ground. However, it must admit that there are no standard procedures to measure this property.

The second part of the proposed draft standard would be aimed at producing recommended methods to calculate the attenuation of sound by a finite impedance reflecting plane (the ground) in the absence of meteorological effects. The recommended procedures would than be limited to distances less than about 30 m. Usage would be to calculated ground equivalence or to correct sound pressure levels (in particular, third-octave or narrow-band spectra) measured from a specific source on a specific site to the expected SPL from the same source on another site. For example the standard could be used to estimate the weighted sound levels from a heat pump at a distance of 15 feet from published values of sound power in bels.

These recommended methods would then complement ANSI S1.26 - 1978 as a precision method to calculate the attenuation of sound due to the ground. An extension to this second part could be a third part to produce a precision method to calculate the total attenuation of

sound outdoors in a systematic way. It is also possible that the work of S12/WG31 could replace the efforts of S1/WG20 part ii) if the document produced by S12/WG31 turns out to be appropriate.

Committee S12, Noise

1) S12/WG15, Measurement and Evaluation of Outdoor Community Noise

To produce a standard for the measurement of outdoor environmental noise with emphasis on the classification of noise surveys relative to temporal and spatial sampling accuracies achieved.

S12/WG15 has produced ANSI S12.9, American National Standard Quantities and Procedures for Description and Measurement of Environmental Sound, Part 1, 2 and 3. The standard quantities and procedures recommended in ANSI S12.9 are an application of the recommended procedures of ANSI S1.13 to the specific cases of sampling environmental noise outdoors. Essentially, ANSI S12.9 samples environmental sound by accepting the environmental and meteorological conditions "as is." The standard therefore provides a statistical sampling of the sound levels of environmental noise from a variety of sources and meteorological conditions.

2) S12/WG 27, Outdoor Measurement of Sound Pressure Level

Develop standardization method for measuring sound pressure levels in the outdoor environment, considering the effects of refraction due to wind and temperature gradients, the effects due to thermal and mechanical turbulence and the effects of variable ground impedance and wind noise.

The draft standard, ANSI S12.18 is another application of ANSI S1.4 to recommend procedures for obtaining sound pressure level measurement that are individually reproducible from a specific source or sources outdoors. The measurements take into account the source height, receiver height, the type of ground, and the local atmospheric conditions. The measurements obtained using the recommended procedures can be used to calculate sound pressure levels at other distances from the source or extrapolated to other environmental or ground conditions. The procedures ensures that measurements from the same source at the same point on different days yeild the same results, or that measurements from the same source at different sites or distances can be corrected and compared reliably.

3) S12/WG31, Predicting Sound Pressure Levels Outdoors

Develop standard method for calculating the attenuation of sound during propagation outdoors in order to predict the levels of noise at a distance from a large variety of sources. The method should be a general engineering procedure that includes the combined effects of: geometrical divergence, atmospheric absorption, hte effects of variable ground impedance, the effects of refraction due to wind and temperature gradients, the effects due to thermal and mechanical trubulence, reflection from surfaces, as well as propagation through foliage.

Whereas ANSI S1.26 - 1978 is a precision method to calculated the attenuation of sound due to molecular absorption alone, S12/WG31 is trying to achieve a document to recommend engineering procedures to calculated the total attenuation of sound during propagation outdoors. Under certain restrictive conditions and if the procedures recommended by S12/WG31 could be used for a variety of different impedance values (different grounds), then the procedures recommended by S12/WG31 could possibly replace the work of S1/WG20 part ii).

If the work of S1/WG2 is a counter part of Draft International Standard ISO/DIS 9613-2, then S1/WG2 is in direct conflict with S12/WG31.